Columbia University School of International and Public Affairs

Bronx Opioid Epidemic
Needs Assessment

Team: Maria Gonzalez Millan, Rachel Lee, Jessica Ohlrich, Chloe Sarnoff
Faculty Advisors:
Diahann Billings-Burford, Dr. Silvia Martins

Spring 2018
Capstone Research
Report

SIPA

Table of Contents

Our Team 1

Acknowledgments 2

Glossary 5

Executive Summary 9

Introduction 11

Methodology 20

Treatment 21

- **Overview** 21
- **Findings** 31
  - **Finding 1:** People with opioid use disorder seek treatment after an event which they perceive as traumatic. These events can be leveraged to link people to treatment. 31
  - **Finding 2:** Family members can be an important motivating factor in helping individuals with opioid use disorder access treatment; however, some lack the information and resources to do so. 32
  - **Finding 3:** Many individuals have limited or inaccurate information about treatment options, which prevents them from accessing the most appropriate treatment. 33
  - **Finding 4:** A lack of updated and readily accessible information related to treatment capacity and availability is a barrier to accessing the most appropriate treatment. 36
  - **Finding 5:** Substantive barriers to accessing certain forms of medication-assisted treatment exist in the Bronx, leading to treatment utilization discrepancies between the Bronx and other boroughs. 37
  - **Finding 6:** Many stakeholders support court-mandated treatment; however, others have concerns about this approach. New models of mandated treatment may address them. 40
- **Recommendations** 41
  - **Recommendation 1:** Direct First Responders to keep information on-hand about treatment programs and distribute such information following crisis events and drug overdoses when appropriate. 41
  - **Recommendation 2:** Provide family members with more information about opioid use disorder and treatment programs to better support their relatives with opioid use disorder. 42
  - **Recommendation 3:** Create targeted, highly visible, and accessible public awareness campaigns to expand accurate information about treatment options. 43
  - **Recommendation 4:** Publish comprehensive resource lists frequently to ensure that providers and patients have accurate information when seeking treatment. 44
  - **Recommendation 5:** Expand existing initiatives to increase access to buprenorphine in the Bronx. . 44
  - **Recommendation 6:** Evaluate the Overdose Avoidance and Recovery (OAR) program to determine the programmatic outcomes and whether the program should be expanded. 45

Continuum of Care . . . 46
Overview . . . 46
Findings . . . 47
Finding 1: Opioid use disorder is a chronic disease. . . . 47
Finding 2: The continuum of care is often weaker when clients receive treatment at siloed facilities (detox, inpatient, outpatient) that do not provide a spectrum of treatment modalities. Conversely, the continuum of care is stronger when at least one of two factors is in place: integrated and/or co-located treatment facilities or case management support to help coordinate care. . . . 48
Finding 3: The continuum of care is weakened because many Bronx treatment providers are not aware of one another's service offerings. . . . 49
Finding 4: To help people maintain their recovery it is crucial to help them secure housing, build support networks, and find meaningful employment. . . . 49
Recommendations . . . 50
Recommendation 1: Communicate that relapse is often a reality in the treatment process, both to individuals seeking treatment and the various stakeholders related to this crisis. . . . 50
Recommendation 2: Communicate the chronic nature of opioid use disorder to both individuals seeking treatment and the various stakeholders related to the crisis. . . . 51
Recommendation 3: Focus on expanding existing co-located/integrated services, as well as building out additional co-located/integrated services. . . . 51
Recommendation 4: Hold biannual community stakeholder events where providers can share their service offerings and build relationships with one another. . . . 52
Recommendation 5: Create additional supportive case management models. . . . 52
Recommendation 6: Provide more recovery support services. . . . 53
Prevention . . . 54
Overview . . . 54
Findings . . . 54
Finding 1: There is insufficient public awareness of the dangers of opioids. . . . 54
Finding 2: Until recently, insufficient provider education contributed to problematic prescribing practices in the Bronx. This has led to insufficient patient education when new prescriptions are written. . . . 55
Finding 3: There is no comprehensive drug and mental health curriculum in the K-12 education system. . . . 56
Recommendations . . . 58
Recommendation 1: Create a highly visible public awareness campaign conveying the dangers of opioids. . . . 58
Recommendation 2: To ensure that patients are receiving appropriate care for chronic pain, providers need to be educated on available screening tools, alternative pain management techniques, and prescribing best practices. . . . 60
Recommendation 3: Establish a comprehensive drug and mental health curriculum in K-12 schools in the Bronx. . . . 61
Appendices . . . 63

Our Team

Maria Jimena Gonzalez Millan is a second-year MPA student concentrating in Development Practice. Prior to SIPA, she worked for a public policy think tank/consulting firm in Mexico City, where she participated in projects on community policing and social prevention of crime. She holds a BA in International Relations from the Instituto Tecnologico Autonomo de Mexico (ITAM).

Rachel Lee is currently pursuing a dual degree in Social Work and Public Administration from Columbia University. She has prior experience in behavioral health policy, providing clinical services to people with substance use disorders, and supporting mothers with children in foster care. She is a native New Yorker and received her undergraduate degree in psychology from Bates College.

Jessica Ohlrich is a second-year MPA student concentrating in Human Rights and Humanitarian Policy with a focus on the United States. She has prior experience working in the Michigan Senate. She received her undergraduate degree in Interdisciplinary Studies in Social Science: Social Science Education, along with completing a second major of Psychology, from Michigan State University.

Chloe Sarnoff is a first-year MPA student concentrating in Urban and Social Policy. She previously worked in strategic communications at a global research firm and a political consulting firm. She has prior experience studying the opioid epidemic in Ohio. She is a native New Yorker and received her undergraduate degree in public policy from Duke University.

Acknowledgments

The Columbia SIPA Capstone team would like to extend our gratitude to our mentors, interviewees, participants, and advisors who made our research possible.

Dr. Silvia Martins, Associate Professor of Epidemiology, Mailman School of Public Health, and **Diahann Billings-Burford,** Executive Director of Cultural Investments at Time Warner Inc., whose advice and feedback guided us throughout this project.

Suzanne Hollman, Saleha Awal, and the rest of the Columbia SIPA Capstone Program coordinators for their logistical support.

All service providers, justice system/legal providers, public safety officials, policy and academic researchers, and individuals in recovery who took time to discuss their perspectives and experiences. Their willingness to participate in our research has furthered our understanding of the opioid crisis in the Bronx and solutions for the community moving forward.

Dr. A. Robin Williams, **Dr. Bijan Kimiagar**, **Dr. Pia M. Mauro**, and **Fatima Shama**, who took time to speak with us, and provided us with expertise that helped guide our research design.

Our clients, **Darcel D. Clark**, Bronx County District Attorney (BXDA); **Bridget G. Brennan**, Special Narcotics Prosecutor (SNP); **Kati Cornell**, Public Information Director at SNP; and **Carmen Facciolo**, Deputy Chief of Strategic Enforcement/Intergovernmental Relations Division at BXDA, who provided us with a wealth of information and contacts to understand not only the crisis, but also the Bronx's unique past and present.

DARCEL D. CLARK

Bronx County District Attorney

Darcel D. Clark became the 13th District Attorney for Bronx County on January 1, 2016. She is the first woman in that position and the first African-American woman to be a District Attorney in New York State.

Prior to her election, District Attorney Clark served as an Associate Justice for the New York State Supreme Court Appellate Division, First Department; a New York State Supreme Court Justice in Bronx County; and a Criminal Court Judge in the Bronx and New York Counties. She spent more than 16 years on the bench.

District Attorney Clark is a lifelong Bronxite, raised in New York City Housing Authority's (NYCHA) Soundview Houses. She attended public schools, graduating from Harry S. Truman High School. She received her Bachelor's Degree in Political Science from Boston College, where she was the first recipient of the University's Martin Luther King, Jr., Memorial Scholarship, and earned her law degree at the Howard University School of Law in Washington, D.C.

District Attorney Clark returned home in 1986 to begin her legal career at the Bronx District Attorney's Office. She prosecuted many cases, including drug felonies, violent crimes, and homicides. District Attorney Clark served as a Supervising ADA in the Narcotics Bureau and the Deputy Chief of the Criminal Court Bureau. In 1999, she left the Office for her first judicial post.

District Attorney Clark is a Vice President of the National District Attorneys Association and a Board member of the District Attorneys Association of the State of New York. She is also a member of Prosecutors Against Gun Violence.

District Attorney Clark serves on the Boston College Board of Trustees and has served in leadership positions in the National Association of Women Judges and the Black Bar Association of Bronx County. She is a former Adjunct Professor at Monroe College School of Criminal Justice.

She is married to Eaton "Ray" Davis, a veteran New York City Police Department (NYPD) Detective.

Throughout her career in public service, District Attorney Clark has endeavored to earn the trust of the people of the Bronx. Her mission as the Bronx District Attorney is "Pursuing Justice with Integrity."

BRIDGET G. BRENNAN

Special Narcotics Prosecutor for the City Of New York

Bridget G. Brennan has been New York City's Special Narcotics Prosecutor since 1998. Appointed by the city's five elected District Attorneys, Ms. Brennan is the first woman to hold that position. Ms. Brennan is in charge of an agency dedicated to the investigation and prosecution of felony narcotics offenses in the city's five boroughs.

The Office of the Special Narcotics Prosecutor (SNP) is widely recognized for its legal and technological expertise and prosecutes national and international drug trafficking and money laundering organizations, as well as local violent drug gangs. Over the past decade, the Office has increasingly focused on conducting complex investigations into the criminal distribution of heroin, fentanyl, fentanyl analogues and addictive prescription drugs.

Under Ms. Brennan's direction, the Office has developed innovative strategies to target emerging problems. Ms. Brennan established units focusing on heroin, prescription drugs, digital forensics, narcotics gangs, money laundering, and related financial crimes. The Office was also a pioneer in offering treatment to qualified addicted defendants.

Ms. Brennan became a New York County Assistant District Attorney in 1983 and was appointed to SNP in 1992. Before her legal career, she was a news reporter in Wisconsin. She attended the University of Wisconsin, where she earned a BA in Journalism and her law degree.

Glossary[1]

Analgesic: Drug that provides pain relief.

Behavioral Therapy: A therapeutic modality during which an individual works with a therapist or counselor to help identify and change potentially self-destructive or unhealthy behavior patterns.

Benzodiazepine: Class of prescription medications typically used to treat anxiety. Can be misused and is increasingly observed in accidental overdoses.

Buprenorphine: Partial opioid receptor agonist that produces weak morphine-like symptoms. Used in medication-assisted treatment to assist patients in ceasing their use of opioids without experiencing withdrawal.

Co-Located Care: A focus on having services located within close physical proximity to one another.[2]

Comorbidity: A medical and/or mental health diagnosis that occurs in combination with another.

Continuum of Care: A treatment system in which clients enter treatment at the level appropriate to their needs and can step up or down to more or less intense levels of treatment as needed.[3]

Detoxification (Detox): A process by which a substance user stops using intoxicating substances to allow his or her body the time to fully clear itself of that substance.

Evidence-Based: The Substance Abuse and Mental Health Services Association defines evidence-based interventions as those that are included in a federal registry of evidence-based interventions, have positive effects on the target outcome reported in a peer-reviewed journal, or have "documented evidence of effectiveness based on guidelines developed by the Center for Substance Abuse Prevention and/or the state, tribe, or jurisdiction" where it took place.[4]

Fentanyl: Synthetic opioid 50–100 times as potent as morphine. Commonly found as an additive in heroin preparations that greatly increases the risk of accidental overdose.

Harm Reduction: Evolving strategy that seeks to reduce the health, social, and socioeconomic risks associated with drug use (whether legal or illegal) without necessarily reducing drug consumption.

Heroin: Strong, rapidly acting opioid receptor agonist that acts on the brain to cause powerful feelings of euphoria. Derived from morphine, it can be snorted, injected, or smoked.

---

1 All definitions come from the Staten Island Report, unless otherwise noted. Citation: Bauman, Myrela, et al. "Staten Island Needs Assessment: Opioid Addiction Prevention and Treatment Systems of Care." Columbia University, School of International and Public Affairs, 2017.

2 National Institute of Mental Health. "Integrated Care." Feb. 2017, www.nimh.nih.gov/health/topics/integrated-care/index.shtml.

3 Forman, Robert F., and Paul D. Nagy. "Substance Abuse: Clinical Issues in Intensive Outpatient Treatment." U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment, 2006, www.ncbi.nlm.nih.gov/books/NBK64088/.

4 SAMHSA—Substance Abuse and Mental Health Services Administration. "Defining 'Evidence-based.'" https://www.samhsa.gov/capt/applying-strategic-prevention-framework/step3-plan/defining-evidence-based.

Inpatient: A medical facility that houses patients during treatment.

Integrated Care: The systematic coordination of general healthcare and behavioral healthcare.[5]

Medication-Assisted Treatment (MAT): A treatment plan for opioid recovery and/or alcohol use disorder that involves the medically supervised use of methadone, buprenorphine, or naltrexone.

Methadone: Synthetic opioid receptor agonist similar to heroin used to decrease withdrawal symptoms for people who have stopped using opioids. Administered orally and can be used in medication-assisted treatment.

Mental Illness: A wide range of behavioral and/or physical symptoms, either reported and/or observed, impairing an individual's ability to perform the activities of daily living. Often referred to as "Mental Health Disorder."

Naloxone (Narcan): Opioid receptor antagonist that binds and blocks receptor activity; has been effectively used as an antidote for suspected opioid overdoses, rapidly reversing the respiratory depression that causes death.

Naltrexone (Vivitrol): Synthetic opioid receptor antagonist used in medication-assisted treatment and administered in pill or injectable form. Vivitrol is a branded preparation of naltrexone that is dosed as a once-monthly injectable.

Needs Assessment: A systematic process for determining and addressing "gaps," or needs, between current conditions and desired "wants," or conditions.[6]

Nonmedical Drug Use: Drug use either without a prescription or with a prescription in a manner other than prescribed.

OASAS: New York State Office of Alcoholism and Substance Abuse Services.

Operation HEAT (Heroin Enforcement/Attainment of Treatment) Working Group: A group of community stakeholders convened by the Bronx District Attorney's Office to address the ongoing opioid crisis in the Bronx.

Opioid: Class of drug that binds to specific receptors in the brain, blocking pain signals.

Opioid Dependency: The state of feeling unable to discontinue the use of opioid drugs.

Opioid Overdose: An acute condition due to excessive use of opioids that may cause death. Can be reversed by the opioid receptor antagonist naloxone; with or without reversal, death can occur.

Opioid Use Disorder: A problematic pattern of opioid use leading to impairment or distress that is clinically significant.[7]

---

[5] SAMHSA—Substance Abuse and Mental Health Services Administration. "What Is Integrated Care." SAMHSA-HRSA Center for Integrated Health Solutions, www.integration.samhsa.gov/about-us/what-is-integrated-care.

[6] University of Connecticut Health. "Needs Assessment Data." Community and Continuing Medical Education, UCONN Health, health.uconn.edu/continuing-medical-education/overview/additional-requirements/needs-assessment-data.

[7] DC. "Module 5: Assessing and Addressing Opioid Use Disorder (OUD)." https://www.cdc.gov/drugoverdose/training/oud/accessible/index.html.

Outpatient: A treatment facility that renders care to patients without housing them.

Over-prescription: The unjustifiably excessive provision of a prescription drug by a provider.

Peer Support Services: Services provided by individuals who have common life experiences with the people they are serving.[8]

Primary Care: Health services that cover a range of prevention, wellness, and treatment for common illnesses. Primary care providers include doctors, nurses, nurse practitioners, and physician assistants. They often maintain long-term relationships with patients and advise and treat patients on a range of health-related issues. They may also coordinate care with specialists.[9]

Primary Prevention: Prevention strategies that are aimed at preventing the first use of opioids.[10]

Recovery: A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential.

Recovery Support Services: The collection of community services that can provide emotional and practical support for continuing remission as well as daily structure and rewarding alternatives to substance use.[11]

Reintegration: A part of the therapeutic process that begins after discharge from a long-term residential treatment facility or after a person is no longer misusing opioids.

Residential Treatment: A form of treatment where patients live in a non-hospital setting and receive 24-hour care. Residential treatment programs can be long-term (6 to 12 months) or short-term (less than 6 months).[12]

SAMHSA: Substance Abuse and Mental Health Services Administration. An agency within the U.S. Department of Health and Human Services that leads public health efforts to advance the behavioral health of the nation.

SAMHSA Treatment Locator: A tool in SAMHSA's website to help people find facilities for substance use or mental health treatment. The locator shows results by address, city, or zip code. Information is updated annually from facility responses to SAMHSA's National Survey of Substance Abuse Treatment Services (N-SSATS) and National Mental Health Services Survey (N-MHSS). New facilities are added monthly.[13]

---

[8] AMHSA—Substance Abuse and Mental Health Services Administration. "Peer Support and Social Inclusion." 2 July 2015, www.samhsa.gov/recovery/peer-support-social-inclusion.

[9] Healthcare.Gov. "Primary Care—HealthCare.gov Glossary." U.S. Centers for Medicare & Medicaid Services, www.healthcare.gov/glossary/primary-care/.

[10] Institute for Work & Health. "Primary, Secondary and Tertiary Prevention." Institute for Work & Health, Apr. 2015, www.iwh.on.ca/what-researchers-mean-by/primary-secondary-and-tertiary-prevention.

[11] U.S. Surgeon General. "Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health." Chapter 5: Recovery: The Many Paths to Wellness, Substance Abuse and Mental Health Services Administration; Office of the Surgeon General., Nov. 2016, https://www.surgeongeneral.gov/library/2016alcoholdrugshealth/index.html.

[12] National Institute on Drug Abuse. "Types of Treatment Programs." Jan. 2018, www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/drug-addiction-treatment-in-united-states/types-treatment-programs.

[13] SAMHSA—Substance Abuse and Mental Health Services Administration. "Behavioral Health Treatment Services Locator." findtreatment.samhsa.gov/.

Self-Medication: The consistent use of prescription, non-prescription, or mind-altering substance by an individual to address the symptoms of what is likely an undiagnosed (or undertreated) mental illness.

Stigma: Disapproval or negative perceptions of certain behaviors or health conditions.

Suboxone (Buprenorphine + Naloxone): Branded prescription drug combination available either as a pill or a film; requires medical supervision. Used in medication-assisted treatment (MAT).

Substance Use Disorder: Recurrent use of alcohol and/or drugs causing clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home.[14]

[14] SAMHSA—Substance Abuse and Mental Health Services Administration. "Substance Use Disorders." 27 Oct. 2015, www.samhsa.gov/disorders/substance-use.

Executive Summary

Opioid-related drug overdoses have increased dramatically across New York City since 2009. In 2017, there were 298 overdose fatalities involving heroin and/or fentanyl in the Bronx, the highest across all five boroughs. Our capstone team conducted a needs assessment of opioid abuse prevention and treatment services in the Bronx, on behalf of the Special Narcotics Prosecutor for New York City and the Bronx District Attorney's Office.

Using information and perspectives gathered through a series of qualitative interviews and Bronx-specific quantitative data, this report identifies factors contributing to the crisis related to **treatment access**, the **continuum of care**, and **prevention strategies**. Our team interviewed stakeholders from the Operation HEAT (Heroin Enforcement/Attainment of Treatment) working group, which includes treatment providers, law enforcement, medical professionals, and community organizations. Additionally, we conducted interviews with stakeholders beyond HEAT, including: justice system organizations/legal service providers, policy and academic researchers, people in recovery, public safety officials, and service providers. These qualitative insights were supplemented by Bronx-level quantitative data on treatment, service utilization, and overdoses. In addition, we conducted a literature review to further explore the body of research related to treatment access, the continuum of care, and prevention strategies. Our report provides recommendations for strategies to improve access to opioid use disorder treatment, initiatives that can support individuals through their recovery and beyond, as well as strategies to improve and expand existing prevention efforts.

Treatment Access:

- Identifies events that motivate individuals to access treatment and offers recommendations on how to best leverage these events.
- Discusses the lack of information about medication-assisted treatment (MAT) that often prevents people from accessing this form of treatment. Recommendations are made to address this information gap so people with opioid use disorder have complete and factual information when choosing which treatment to pursue.
- Examines how a lack of readily available and accessible information is a barrier to accessing treatment.
- Explores the significant historical barriers that have led to discrepancies in how medication-assisted treatment is provided in the Bronx, relative to other communities in New York City.
- Highlights the impact of court-mandated treatment on treatment utilization and efficacy.

Continuum of Care:

- Examines the importance of establishing and maintaining a continuum of care, which is essential for recovery.
- Stresses the need to acknowledge opioid use disorder as a chronic disease.

- Finds that co-located and integrated health care services can strengthen the continuity of care and recommends that these services be expanded in the Bronx. Furthermore, the continuum of care is reinforced with increased recovery support services, case management, and community engagement.

Prevention:

- Identifies first, insufficient public awareness related to the harms of opioid use, and second, the opportunity for a public awareness campaign to educate the community on these dangers.
- Captures the effect of historically insufficient patient education related to the potential dangers of opioid prescription drugs.
- Identifies insufficient comprehensive drug education in public schools and the need to establish comprehensive drug education in Bronx public schools.

Introduction: The Opioid Crisis in the United States and the Bronx

National Landscape

America's opioid epidemic is becoming deadlier every year. From 1999 to 2016, more than 350,000 people died from opioid-related drug overdoses.[15] In 2016 alone, more than 42,000 people died as a result of opioid overdoses, a fivefold increase from 1999.[16]

Between 2015 and 2016, more than three out of five drug overdoses involved opioids, with opioid overdose fatalities significantly increasing in the Northeast, Midwest, and South Census Regions.[17] Drug overdoses are now the leading cause of death for Americans under the age of 50.[18]

Opioids are a class of drugs that include prescription pain relievers, such as oxycodone, hydrocodone, codeine, morphine, as well as illicit drugs like heroin and synthetic opioids, like fentanyl, which is more than 50 times as powerful as heroin.[19] Opioids interact with receptors on nerve cells in the brain and nervous system to produce pleasurable effects and relieve pain.[20] They are also highly addictive.

Progression of the Epidemic

1. The current opioid epidemic in the United States can be divided into three waves:
2. **1990—2010:** Doctors increasingly prescribe opioids for acute pain, chronic pain, and pain management, which leads to an increase in prescription opioid use and misuse across the U.S., resulting in a rise of opioid overdose fatalities.[21]
3. **2010—2013:** Illicit opioid overdose fatalities increase[22] as people turn to cheaper opioid alternatives like heroin and fentanyl.[23]

---

[15] Centers for Disease Control and Prevention. "Understanding the Epidemic." 30 Aug. 2017, www.cdc.gov/drugoverdose/epidemic/index.html.

[16] Centers for Disease Control and Prevention. "Drug Overdose Death Data." 19 Dec. 2017, www.cdc.gov/drugoverdose/data/statedeaths.html.

[17] Ibid.

[18] New York Times, "C.D.C. Reports a Record Jump in Drug Overdose Deaths Last Year." September 12, 2018. https://www.nytimes.com/2017/11/03/health/deaths-drug-overdose-cdc.html.

[19] American Society of Addiction Medicine. "Opioid Addiction: 2016 Facts & Figures." 2016. https://www.asam.org/docs/default-source/advocacy/opioid-addiction-disease-facts-figures.pdf.

[20] Ibid.

[21] Centers for Disease Control and Prevention. "Understanding the Epidemic." 30 Aug. 2017, www.cdc.gov/drugoverdose/epidemic/index.html.

[22] Ibid.

[23] Associated Press. "Opioid Epidemic Shares Chilling Similarities with Past Drug Crises." STAT, 29 Oct. 2017, www.statnews.com/2017/10/29/opioid-epidemic-shares-chilling-similarities-with-past-drug-crises.

2013—Today: Significant increases in heroin and fentanyl-related opioid overdoses are pervasive across the U.S.[24]

In 2016, an estimated 2.1 million Americans had an opioid use disorder and 2.1 million people misused prescription opioids for the first time.[25] In 2016, an estimated 948,000 people used heroin (170,000 for the first time), and 15,469 people died from drug overdoses attributed to heroin across the United States.[26] An additional 19,413 people died from overdoses attributed to synthetic opioids, namely fentanyl.[27]

Preliminary data for 2017 suggests that opioid-related overdose fatalities increased from 2016. From July 2016 through September 2017, opioid overdoses increased by 30% in 45 states, and large cities in 16 states saw a 54% increase in opioid overdoses.[28]

New York City and the Bronx

Drug overdoses take more lives in New York City than homicides, suicides, and car accidents combined.[29] In New York City, someone dies from a drug overdose every seven hours.[30] The Bronx and Staten Island have the highest rates of overdose death across the city. In 2017, 363 Bronx residents fatally overdosed, the highest number of the city's five boroughs, according to data released by the New York Department of Health and Mental Hygiene (DOHMH) in September 2018. More than 80% of all overdose fatalities in the Bronx involved heroin and/or fentanyl.[31] From 2010 to 2017, overdose deaths among Bronx residents increased by 184%.[32] The number of overdose deaths increased in the Bronx, Brooklyn, and Queens, while decreasing in Manhattan and Staten Island. In 2017, three out of the five New York City neighborhoods with the highest rates of opioid related-deaths were in the Bronx (Hunts Point-Mott Haven, Highbridge-Morrisania and Fordham-Bronx Park). Overdose death rates in Hunts Point-Mott Haven and Highbridge-Morrisania were more than double the city's average.[33] The Bronx is in the midst of its own unique opioid crisis that in many ways is different from the national epidemic and the crisis in Staten Island.

---

[24] Centers for Disease Control and Prevention. "Understanding the Epidemic." 30 Aug. 2017, www.cdc.gov/drugoverdose/epidemic/index.html.

[25] Department of Health and Human Services. "The Opioid Epidemic By The Numbers." HHS.Gov. 2018. https://www.hhs.gov/opioids/sites/default/files/2018-01/opioids-infographic.pdf.

[26] Ibid.

[27] Ibid.

[28] Centers for Disease Control and Prevention. "Opioid Overdoses Treated in Emergency Departments." 18 Mar. 2018. https://www.cdc.gov/vitalsigns/opioid-overdoses/index.html.

[29] New York City Department of Health. "Unintentional Drug Poisoning (Overdose) Deaths 1 and 2, 2017 New York City." NYC.Gov., Oct. 2017. http://www1.nyc.gov/assets/doh/downloads/pdf/basas/provisional-overdose-report-second-quarter.pdf.

[30] Ibid.

[31] New York City Department of Health. "Unintentional Drug Poisoning (Overdose) Deaths in New York City, 2000 to 2017." September 2018. https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief104.pdf.

[32] New York City Department of Health and Mental Hygiene. "Unintentional Drug Poisoning (Overdose) Deaths in New York City, 2010–2012." 2013. https://www1.nyc.gov/assets/doh/downloads/pdf/epi/datatable33.pdf.

[33] New York City Department of Health. "Unintentional Drug Poisoning (Overdose) Deaths in New York City, 2000 to 2017." September 2018. https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief104.pdf.

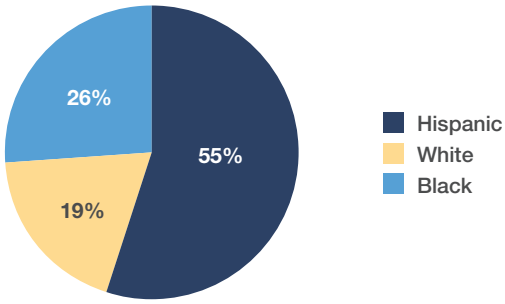
Demographics of the Epidemic in the Bronx

The opioid crisis impacts the Bronx differently than the other boroughs of New York City and the majority of other communities across the country.

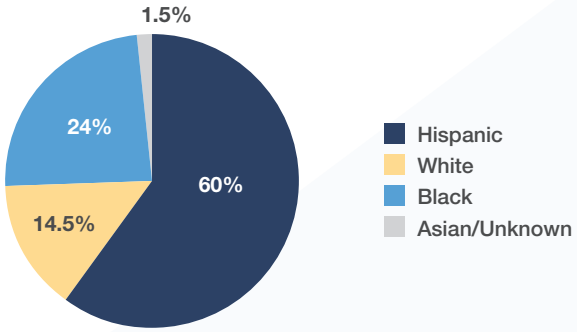
Race/Ethnicity

For one, opioid overdose fatalities in the Bronx are disproportionately concentrated among Hispanic individuals, compared to city, state, and countrywide breakdowns. According to preliminary data from the Bronx District Attorney's office, 60% of individuals who fatally overdosed in the Bronx in 2017 were Hispanic.[34] In 2016, 55% of fatal opioid overdose victims were Hispanic, 26% were Black and 19% were White.[35] Although the representation of Hispanic individuals among the borough's opioid-related overdose fatalities mirrors the Bronx's population generally (54% of Bronx residents are Hispanic, 30% are non-Hispanic black, and 11% are non-Hispanic white),[36] it is substantially different from the race breakdowns of opioid overdose fatalities across the city and state.

Bronx Opioid Overdose Deaths by Race (2016)[37]



Bronx Opioid Overdose Deaths by Race (Preliminary, 2017)[38]



---

[34] Preliminary 2017 data provided by Bronx District Attorney's Office

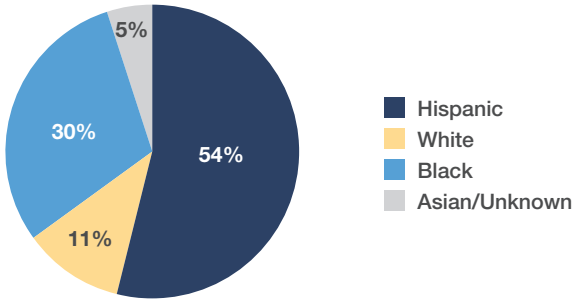
[35] Bureau of Vital Statistics/Office of the Chief Medical Examiner, New York City; "Number and rate of unintentional drug poisoning (overdose) deaths involving opioids, Bronx residents, 2010-2016*." Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2014 updated October 2015. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.

[36] Data USA. "Bronx County, NY." https://datausa.io/profile/geo/bronx-county-ny/#demographics.

[37] Bureau of Vital Statistics/Office of the Chief Medical Examiner, New York City; "Number and rate of unintentional drug poisoning (overdose) deaths involving opioids, Bronx residents, 2010-2016*." Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2014 updated October 2015. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.

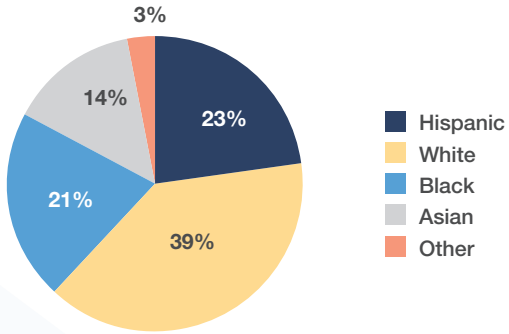
[38] Preliminary 2017 data provided by the Bronx District Attorney's Office

Bronx Population by Race (2010 Census)[39]



Of the people who fatally overdosed using opioids across New York City in 2017, 42% were White, non-Hispanic; 26% were Black, non-Hispanic; and 33% were Hispanic.[40] In 2017, of the people who fatally overdosed using opioids in any borough besides the Bronx, 59% were White, 16% were Black, 22% were Hispanic, 3% were any other race, according to preliminary data provided by the Bronx District Attorney's Office.[41] Across New York State, 70% of all fatal, opioid-related overdoses in 2016 occurred among white, non-Hispanic individuals; 11% among black, non-Hispanic individuals; and 16% among Hispanic individuals.[42]

Population by Race Across New York City Boroughs (Excluding the Bronx) (2010 Census)[43]



[39] New York City Department of City Planning. "Decennial Census—Census 2010." NYC.Gov. 2010. https://www1.nyc.gov/site/planning/data-maps/nyc-population/census-2010.page.

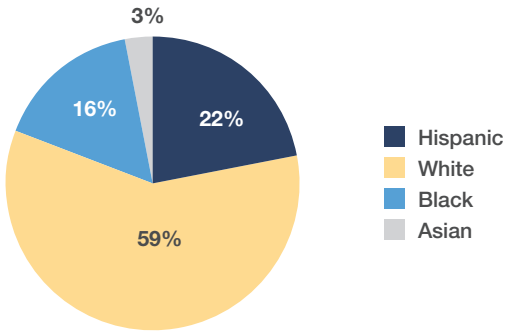
[40] New York City Department of Health. "Unintentional Drug Poisoning (Overdose) Deaths in New York City, 2000 to 2017." September 2018. https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief104.pdf.

[41] Preliminary 2017 data provided by the Bronx District Attorney's Office.

[42] The Henry J. Kaiser Family Foundation. "Opioid Overdose Deaths by Race/Ethnicity." 1 Feb. 2018, https://www.kff.org/other/state-indicator/opioid-overdose-deaths-by-raceethnicity/?dataView=1%C2%A4tTimeframe%3D0&currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22-asc%22%7D.

[43] New York City Department of City Planning. "Decennial Census—Census 2010." NYC.Gov. 2010. https://www1.nyc.gov/site/planning/data-maps/nyc-population/census-2010.page.

Opioid Overdose Deaths by Race Across New York City Boroughs (Excluding Bronx) (Preliminary, 2017)[44]



The racial breakdown in the Bronx diverges even more significantly when compared with nationwide data. In 2016, 79%[45] of opioid-related overdose fatalities nationwide occurred among white, non-Hispanic individuals; 10% among black, non-Hispanic individuals; and only 8% among Hispanic individuals.[46] In fact, the only state with a majority of fatal opioid overdoses among Hispanic individuals was New Mexico.[47]

Age

The Bronx population affected by opioid use disorder is also older than the populations affected across New York City. Preliminary data from 2017 shows that 75% of opioid-related overdoses in the Bronx occurred among individuals aged 35+; 23% among individuals aged 55+. Across New York City, DOHMH data for 2017 shows that 72% of opioid-related overdoses occurred among individuals aged 35+; 26% among individuals aged 55+.[48] Excluding the Bronx, only 60% of opioid-related overdoses occurred among individuals 35+; 17% among individuals 55+ in 2017.[49] The Bronx 35+ population is overrepresented among opioid-related overdose fatalities, despite the Bronx having a similar adult age distribution as the rest of New York City.

---

[44] Preliminary 2017 data provided by the Bronx District Attorney's Office.

[45] The Henry J. Kaiser Family Foundation. "Opioid Overdose Deaths by Race/Ethnicity." 1 Feb. 2018, www.kff.org/other/state-indicator/opioid-overdose-deaths-by-raceethnicity/?dataView=1¤tTimeframe=0&sortModel=%7B%22colId%22%3A%22Location%22%2C%22sort%22%3A%22asc%22%7D.

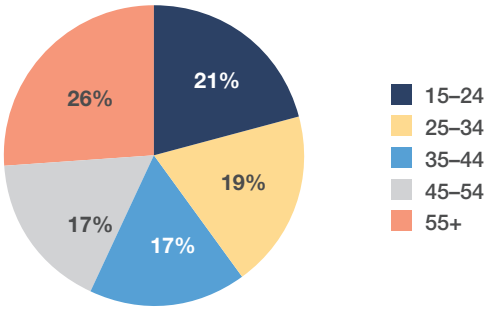
[46] Among the deaths with drug overdose as the underlying cause, the type of opioid involved is indicated by the following ICD-10 multiple cause-of-death codes: opioids (T40.0, T40.1, T40.2, T40.3, T40.4, or T40.6); natural and semisynthetic opioids (T40.2); methadone (T40.3); synthetic opioids, other than methadone (T40.4); and heroin (T40.1). The Henry J. Kaiser Family Foundation. "Opioid Overdose Deaths by Race/Ethnicity." 1 Feb. 2018, www.kff.org/other/state-indicator/opioid-overdose-deaths-by-raceethnicity/?dataView=1¤tTimeframe=0&sortModel=%7B%22colId%22%3A%22Location%22%2C%22sort%22%3A%22asc%22%7D.

[47] The Henry J. Kaiser Family Foundation. "Opioid Overdose Deaths by Race/Ethnicity." 1 Feb. 2018, www.kff.org/other/state-indicator/opioid-overdose-deaths-by-raceethnicity/?dataView=1¤tTimeframe=0&sortModel=%7B%22colId%22%3A%22Location%22%2C%22sort%22%3A%22asc%22%7D.

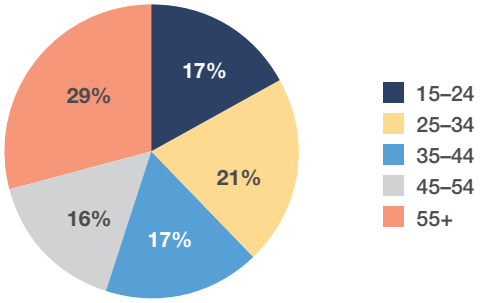
[48] New York City Department of Health. "Unintentional Drug Poisoning (Overdose) Deaths in New York City, 2000 to 2017." September 2018. https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief104.pdf.

[49] Preliminary 2017 data provided by the Bronx District Attorney's Office.

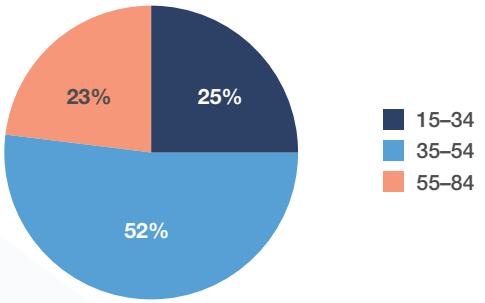
Bronx Population by Age (2010 Census)[50]



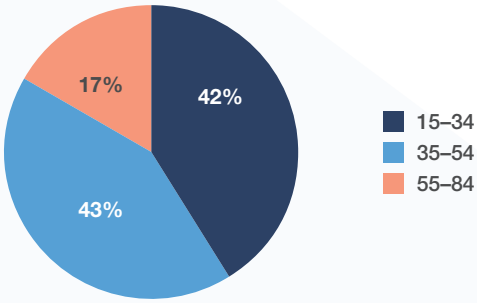
Population by Age Across New York City Boroughs (Excluding the Bronx) (2010 Census) [51]



Bronx Opioid Overdoses by Age (Preliminary, 2017)[52]



Opioid Overdoses by Age Across New York City Boroughs (Excluding the Bronx) (Preliminary, 2017)[53]



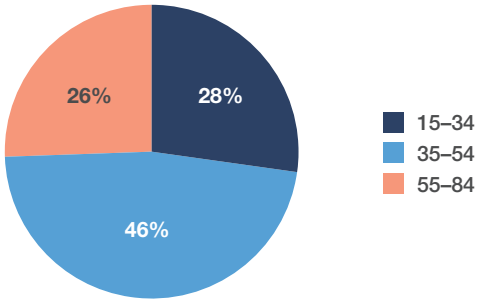
[50] New York City Department of City Planning."Decennial Census—Census 2010." NYC.Gov.2010. https://www1.nyc.gov/site/planning/data-maps/nyc-population/census-2010.page (Data is for 15+ Population).

[51] Ibid.

[52] Preliminary 2017 data provided by the Bronx District Attorney's Office.

[53] Ibid.

New York City Opioid Overdoses by Age (2017)[54]



These demographic characteristics are not the only aspects of the Bronx's opioid crisis that make it different from the national landscape of the epidemic. Unlike the narrative of the national opioid epidemic, the crisis in the Bronx cannot simply be explained by the misuse of prescription opioids and an evolution to heroin and fentanyl among new drug users. The Bronx's story is complex and inextricably linked to the borough's history with poverty, substance abuse, trauma, and mental health, as well as its position as an epicenter of supply for opioids locally and regionally.

Poverty, Mental Health, and Substance Use Disorder

Poverty is pervasive across the Bronx and is a contributing factor to the borough's current, and prior, drug crises. It has been well documented that people living in poverty have poor overall health. The Bronx is the least healthy county in New York State and has high rates of chronic diseases including diabetes, cardiovascular disease, respiratory disease, cancer, and obesity.[55] Poverty also negatively impacts mental health,[56] and mental health issues often co-occur with substance use disorders.

More than 56% of Bronx households report median annual incomes of less than $39,300,[57] and one in three Bronx residents live below the federal poverty level—less than $18,310 per year for a family of three.[58] In the South Bronx, the poverty rate is 36.9%, and the severe poverty rate (living on less than $2 per day per person)[59] is 16.6%.[60] The Bronx has had the city's highest poverty rate for more than a decade, and today it hovers just above 28% of the

---

[54] New York City Department of Health. "Unintentional Drug Poisoning (Overdose) Deaths in New York City, 2000 to 2017." September 2018. https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief104.pdf.

[55] New York State Department of Health. "New York City Health Provider Partnership Bronx Community Needs Assessment Final Draft November 14, 2014." Health.NYC.gov., New York Academy of Medicine. 14 Nov. 2014. https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/pps_applications/docs/st_barnabas_hosp_dba_sbh_health_system/3.4_st_barnabas_cna.pdf.

[56] The City of New York, Office of the Mayor. "Report: Understanding New York City's Mental health Challenge." NYC.Gov. 2015. http://www1.nyc.gov/assets/home/downloads/pdf/press-releases/2015/thriveNYC_white_paper.pdf.

[57] "Bronx 2014 Stats and the City." 2013, mycrains.crainsnewyork.com/stats-and-the-city/2014/boroughs/bronx.

[58] Crain's New York Business. "A Bronx Tale: The Doorway to Homelessness in New York City." Institute for Children, Poverty & Homelessness. Feb. 2012. http://www.icphusa.org/new_york_city/4215/.

[59] Shaefer, H. Luke, and Kathryn Edin. "Extreme Poverty in the United States, 1996 to 2011." Gerald R. Ford School of Public Policy, University of Michigan. National Poverty Center, Feb. 2012.

[60] Ibid.

borough's population, nearly 10% higher than the city-wide average.[61] High poverty rates and housing insecurity drive many Bronx individuals and families into homelessness. In 2017, 103 homeless individuals across New York City died as a result of drug-related issues; 86 from drug overdoses and 17 from chronic drug use. More than 75% of the overdose deaths involved opioids.[62]

Serious mental health issues are twice as common for adults who live below 200% of the federal poverty level compared to those living 200% above it.[63] Many Bronx residents also have mental health issues, including PTSD, bipolar disorder, schizophrenia, and anxiety disorders, many of which remain untreated.[64] Additionally, many individuals with mental health disorders have co-occurring substance use disorders. Several national surveys found that roughly half of those who experience a mental illness over the course of their lives also experience a substance use disorder, and vice versa.[65]

However, despite the prevalence of mental health issues and substance use disorders in the Bronx, many people do not access treatment. Some attempt to manage their mental health conditions by self-medicating with alcohol and drugs. A study by the New York City Department of Health and Mental Hygiene found that 41% of New York City adults with a serious mental health issue said they needed treatment at some point in the past year, but did not receive it or delayed getting it.[66] Additionally, stigma around mental health and substance use disorder may deter people in the Bronx from seeking treatment.[67] [68]

A Legacy of Demand, an Influx of Supply

While the factors discussed above help explain the historic and current demand for opioids in the Bronx, today's crisis cannot be explained without underscoring the role of increased supply. Substance use disorder, particularly opioid use disorder, is not a new problem for the Bronx. During the 1960s and 1970s, the borough battled with increased heroin use and rising overdose rates, but over the past ten years a growing supply of prescription opioids, followed

---

[61] United States Census Bureau. "Quick Facts Bronx County (Bronx Borough), New York." Census.Gov. https://www.census.gov/quickfacts/fact/table/bronxcountybronxboroughnewyork/PST045217.

[62] Cheney, Brendan. "Opioid crisis driving record number of deaths among city's homelessness, report finds." Politico.com, Politico. 16 Jan. 2018. https://www.politico.com/states/new-york/city-hall/story/2018/01/16/opioid-crisis-driving-record-number-of-deaths-among-citys-homeless-report-finds-189210.

[63] National Institute of Mental Health. "Mental Health: Culture, Race, and Ethnicity: A Supplement to Mental Health: A Report of the Surgeon General." Office of the Surgeon General (US): Center for Mental Health Services (US): National Institute of Mental Health (US). Aug. 2011. https://www.ncbi.nlm.nih.gov/books/NBK44249/#A1210.

[64] The City of New York, Office of the Mayor. "Report: Understanding New York City's Mental health Challenge." NYC.Gov. 2015. http://www1.nyc.gov/assets/home/downloads/pdf/press-releases/2015/thriveNYC_white_paper.pdf.

[65] National Institute on Drug Abuse. "Common Comorbidities with Substance Use Disorders." 27 Feb. 2018, https://www.drugabuse.gov/publications/research-reports/common-comorbidities-substance-use-disorders.

[66] The City of New York, Office of the Mayor. "Report: Understanding New York City's Mental health Challenge." NYC.Gov. 2015. http://www1.nyc.gov/assets/home/downloads/pdf/press-releases/2015/thriveNYC_white_paper.pdf.

[67] SBH Health System Bronx. "Perceptions Among Mental Illness Remain The Same For Many Whether In The Bronx Or The 'Old Country.'" http://www.sbhny.org/blog/perceptions-among-mental-illness-remain-the-same-for-many-whether-in-the-bronx-or-the-old-country.

[68] McCray, Chirlane. "It's time to destigmatize mental health. We can start by talking about it." The Guardian. 16 May 2016. https://www.theguardian.com/commentisfree/2016/may/16/mental-health-month-stigma-talk-about-it.

by heroin and most recently fentanyl, has flooded street markets, making Bronx residents with histories of drug use particularly vulnerable.

In speaking with Bridget Brennan, New York City's Special Narcotics Prosecutor, we learned that the Bronx is at the center of illegal opioid distribution for the city and region. Seizures of prescription opioids have increased dramatically since 2007, as have prescriptions filled for oxycodone.[69] In 2017, the Bronx had the second highest number of oxycodone prescriptions filled across New York City's boroughs (277,876).[70] Between 2010 and 2017, the Bronx saw a 159% increase in oxycodone prescriptions filled. The majority of these prescriptions are concentrated in neighborhoods in the South Bronx.[71] Additionally, between 2013 and 2014, SNP reported a 329% increase in pounds of heroin seized in New York City and the increased supply of fentanyl across New York City is even more shocking. In 2017, SNP seized 1300% more pounds of fentanyl than the year prior.[72] The majority of this new supply was recovered in the Bronx, which is home to many of the city's heroin and fentanyl packaging mills. In 2017, there were at least nine seizures of fentanyl in quantities above 20 pounds, five of which were in the Bronx.[73]

The factors contributing to an increase in demand for opioids in the Bronx, coupled with the influx of supply of prescription opioids, heroin, and most recently fentanyl, help explain the landscape of the current crisis.

Many major transportation routes run through the Bronx, a characteristic that is exploited by drug traffickers. Photo by Angel Chevrestt.

---

[69] Special Narcotics Prosecutor, Bridget Brennan. "2017 Seizures Data." 2017 Seizures Data, Office of the Special Narcotics Prosecutor, 2017.

[70] Special Narcotics Prosecutor, Bridget Brennan. "Prescriptions Filled for Oxycodone in the Bronx." Office of the Special Narcotics Prosecutor, 2017.

[71] Ibid.

[72] Special Narcotics Prosecutor, Bridget Brennan. "2017 Seizures Data." 2017 Seizures Data, Office of the Special Narcotics Prosecutor, 2017.

[73] Ibid.

Methodology

The methodology employed for this needs assessment was a geographic-focused case study. The case study relied on qualitative data from semi-structured interviews with stakeholders in the Bronx. These interviews were the basis for our findings and recommendations.

To ground our research project, we first consulted with experts from the fields of psychiatry, substance use disorder research, clinical and epidemiologic research, public policy, and qualitative research (See **Appendix 1** for the list of consulted experts). The team also conducted a limited literature review, searching Pubmed, Columbia Libraries Catalog (CLIO), and Google Scholar for peer-reviewed articles published between 2000 and 2018.

Where relevant, the team also analyzed quantitative data reports on treatment and overdose statistics published by state, city, and borough offices, and print and online media reports. Specifically, the team reviewed the nature of treatment facilities in the Bronx, the demographics of people entering treatment, and the demographics of people who overdosed.

Using information from our initial research, we developed a research framework that categorized the research into three main categories: treatment, the continuum of care, and prevention. Using these three categories, we then developed a set of interview questions that would be asked across each interview (See **Appendix 2** for standard questions). The questions were intentionally broad and open-ended to allow each interviewee to approach the interview from their own unique perspective without biasing or restricting potential responses.

Once the standard interview questions were developed, the team reached out to each organization within the HEAT working group to request an interview. Ultimately, the team spoke to 24 unique individuals, across 18 interviews conducted with HEAT working group members (See **Appendix 3** for a detailed list of these HEAT working group members). In addition to interviews with the HEAT working group, the team also interviewed additional stakeholders in the Bronx. Ultimately, the team spoke to an additional 15 unique individuals across the 12 non-HEAT interviews conducted (See **Appendix 3** for a detailed list of non-HEAT stakeholders that the team spoke to).

In total, the team conducted 30 interviews with 39 unique individuals between March 2, 2018 and April 27, 2018. These interviews can be categorized into five broad categories: people in recovery, justice system organizations/legal services providers, policy and academic researchers, public safety officials, and service providers. Of the 30 interviews conducted: four were with people in recovery, seven were with justice system organizations/legal services providers, six with policy and academic researchers, two with public safety officials, and eleven with service providers.

During these semi-structured interviews, the team built in time to listen to any comments or ideas outside of our standard questions. Each interview lasted approximately 30 minutes. A minimum of two team members conducted these interviews whenever possible to ensure consistent interpretation of information.

After the interviews were conducted, the team analyzed interviewee responses to each standard question. During the question-by-question analysis, the team identified trends and patterns, which ultimately constructed the basis for the team's findings and recommendations.

Treatment

Treatment Overview

Treatment Components

Many individuals with opioid use disorder choose to enter treatment to address their substance use disorder. According to the National Institute of Drug Abuse (NIDA), the treatment components that "have an evidence base supporting their use" are mainly behavioral therapies and pharmacotherapies, also known as medication-assisted treatment (MAT).[74] The most common form of treatment are behavioral therapies, which can be provided through individual, family, and group counseling. These therapies "help engage people in drug abuse treatment, provide incentives for them to remain abstinent, modify their attitudes and behaviors related to drug abuse, and increase their life skills to handle stressful circumstances and environmental cues that may trigger intense craving for drugs and prompt another cycle of compulsive abuse."[75]

Some, but not all, treatment plans include MAT. The Substance Abuse and Mental Health Services Administration (SAMHSA) defines MAT as "the use of medications, in combination with counseling and behavioral therapies, to provide a 'whole-patient' approach to the treatment of substance use disorders."[76] The medications used to treat opioid use disorders are methadone, buprenorphine, and naltrexone (as well as Suboxone, which is a combination of buprenorphine and naloxone). These medications "normalize brain chemistry, block the euphoric effects of [...] opioids, relieve physiological cravings, and normalize body functions without the negative effects of the abused drug" and can be used safely "for months, years, several years, or even a lifetime."[77] These medications are approved by the Food and Drug Administration (FDA) and can only be provided by SAMHSA accredited professionals and certified opioid treatment programs (OTPs). Research shows that medication, combined with therapy, can help treat opioid use disorder and sustain recovery.[78] Additionally, federal law "requires patients who receive treatment in an OTP to receive medical, counseling, vocational, educational, and other assessment and treatment services, in addition to prescribed medication."[79]

---

[74] National Institute on Drug Abuse. "Principles of Drug Addiction Treatment: A Research-Based Guide." Third ed., 2018.

[75] Ibid.

[76] SAMHSA—Substance Abuse and Mental Health Services Administration. "Medication and Counseling Treatment." 15 June 2015, www.samhsa.gov/medication-assisted-treatment/treatment#medications-used-in-mat.

[77] Ibid.

[78] Ibid.

[79] Ibid.

Pros and Cons of MAT Modalities[80]

MAT Modality	Pros	Cons
Methadone	• Easy induction from active use • Lower medication costs but program fees vary • Best medication for retaining patients in treatment at 12 months (~80%) • Lowers drug use and criminal activity • Treatment of choice for pregnant women	• Requires early morning daily dosing • Many states and rural areas have limited access • Programs are targeted by drug dealers • Patients often combine benzodiazepines and other medications to get "high" on a regular dose — i.e. patients "nodding out" — Can lead to overdose (esp. first 2 weeks) • Can cause medical complications (arrhythmias) • Patients face more stigma
Buprenorphine	• Greatly reduces overdose risk • Very good pain control when dosed every 6 hours • Can be prescribed like any other medication • Often monitored in prescription drug monitoring programs (PMPs) • May produce better outcomes than methadone for pregnant women and newborns • Somewhat less stigma (remains controversial)	• Patients must be in withdrawal to take first dose — Can precipitate withdrawal if taken too soon — As a result, some patients struggle to start • Physicians need DEA waiver, few prescribe it • Has street value and can be sold/diverted • Patients can intentionally space out doses and use opioids in between • Some people inject it (despite abuse deterrence) • Tapering may be more difficult than with other MATs
Naltrexone	• Patients no longer fear going into withdrawal • Blocks opioid use of any kind — 50% of patients "test" the blockade initially and quickly extinguish use • Can be given as monthly injection (Vivitrol) to ensure adherence and block relapse • Injection has 2 times retention as oral treatment • Less stigma • Does not require tapering	• Most difficult induction, requires 3–10 days of abstinence: Patients must detox, often drop out • Hard to find providers • Many insurers don't reimburse (costs $1,500/mo) • Lowers tolerance: if patients stop medication they could overdose if relapse • No pain relief and should be stopped for surgery

[80] William, Robin. "The Pros and Cons of MAT." Microsoft PowerPoint file. https://s3.amazonaws.com/medicallyassistedtreatment/presentations/The+Pros+and+Cons+of+MAT.pdf.

MAT Legislation

Methadone is classified by the Drug Enforcement Administration (DEA) as a Schedule II drug in the Controlled Substance Act (CSA) Scheduling. Because of this, "practitioners wishing to administer and dispense [methadone] for maintenance and detoxification treatment must obtain a separate DEA registration as a Narcotic Treatment Program [NTP]."[81] The provider also needs to be registered as a Center for Substance Abuse Treatment (CSAT) with SAMHSA and the state methadone authority. Methadone can be addictive and can cause an overdose, so it must be taken as prescribed. Usually, patients are required to go to a clinic every day, where they receive it under supervision. "After a period of stability (based on progress and proven, consistent compliance with the medication dosage), patients may be allowed to take methadone at home between program visits."[82]

Buprenorphine is classified as a Schedule III drug, but the Drug Addiction Treatment Act (DATA), waives the requirement of registering as an NTP with the DEA to providers that want to use it in treatment. "DATA waivers are only granted to qualified physicians; hospitals and mid-level practitioners do not qualify."[83] Waived physicians are approved to treat either 30 or 100 patients at one time and need to get a new certificate if they want to change this cap. The DEA can conduct "periodic on-site inspections" of registrants and waived providers "to ensure compliance with the DATA and its implementing regulations."[84]

Naltrexone is not on the list of the DEA's controlled substances. As a result, this medication "can be prescribed by any health care provider who is licensed to prescribe medications."[85]

According to the American Society of Addiction Medicine (ASAM), "for most patients with opioid use disorder, the use of medications (combined with psychosocial treatment) is superior to withdrawal management (combined with psychosocial treatment), followed finally by psychosocial treatment on its own."[86] SAMHSA's National Registry of Evidence-based Programs and Practices (NREPP) lists three interventions for "opioid use and opioid use disorder." Two of them (buprenorphine and methadone) are shown to be effective in reducing substance use.[87] The other intervention included is the Recovery and Training Self Help (RTSH) for Opioid Use, which combines 23 recovery trainings, weekly self-help group meetings, weekend recreational activities, and support networks. This intervention is listed as having a lower level of evidence, showing "promising results."[88] Programs must apply to be included in the SAMHSA registry; the list is not exhaustive of all programs that may be available.

---

[81] DEA—Drug Enforcement Administration, Diversion Control Division. "Practitioner's Manual—SECTION VI." www.deadiversion.usdoj.gov/pubs/manuals/pract/section6.htm.

[82] SAMHSA—Substance Abuse and Mental Health Services Administration. "Methadone." 16 June 2015, www.samhsa.gov/medication-assisted-treatment/treatment/methadone.

[83] DEA—Drug Enforcement Administration, Office of Diversion Control. "DEA Requirements for DATA Waived Physicians (DWPs)." www.deadiversion.usdoj.gov/pubs/docs/dwp_buprenorphine.htm

[84] Ibid.

[85] SAMHSA—Substance Abuse and Mental Health Services Administration. "Naltrexone." 16 June 2015, https://www.samhsa.gov/medication-assisted-treatment/treatment/naltrexone.

[86] American Society of Addiction Medicine - ASAM. "The ASAM National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use." 2015.

[87] SAMHSA—Substance Abuse and Mental Health Services Administration. "National Registry of Evidence-based Programs and Practices (NREPP)." https://nrepp.samhsa.gov/AdvancedSearch.aspx.

[88] Ibid.

Despite its numerous benefits, MAT also has potential drawbacks. Taking MAT can be inconvenient (for example, having to go to a clinic every day to get methadone) and can cause physical dependence and unpleasant side effects. Because of these potential drawbacks, the ASAM establishes that "the choice among available treatment options should be a shared decision between the clinician and the patient" taking into account the patient's preferences and clinical history.[89]

Treatment Modalities

Treatment encompasses different levels of care and, as such, is provided in various settings. In general, it starts with detoxification (clearing the body of opioids) and medically managed withdrawal (using medication to assist with the "unpleasant and potentially fatal" physiological effects of stopping use).[90] These services may need to be provided in hospitals if the dependence and withdrawal are acute, but can be offered in clinics or community-based settings with medical supervision for more moderate conditions and even in the home if there is a supportive environment.[91] However, "detoxification alone does not address the psychological, social, and behavioral problems associated with addiction and therefore does not typically produce lasting behavioral changes necessary for recovery; [it] should thus be followed by a formal assessment and referral to drug addiction treatment."[92]

Treatment in inpatient facilities (also referred to as residential) usually follows and can be either long-term or short-term. Long-term residential treatment "provides care 24 hours a day, generally in non-hospital settings," most commonly for six to twelve months.[93] Treatment in this setting is highly structured and is focused on learning new coping skills and building positive habits, with the help of other residents and staff.[94] Many facilities offer other supportive services on site. The inpatient setting may be appropriate for individuals that have a hard time engaging with treatment in a less structured environment; have comorbidities that require medical attention; have "social, emotional or developmental barriers to participation in treatment outside of this setting"; or are at risk because of their drug use or "impaired judgement that interferes with decision making."[95] However, less intensive modalities certified by the New York State's Office of Alcoholism and Substance Abuse Services (OASAS) exist and may be appropriate for people who have already been to treatment and require housing or support because their environment is not conducive to recovery.[96] Short-term residential treatment "has a focus on detoxification [...] as well as providing initial intensive treatment, and preparation for a return to community-based settings."[97]

---

89 American Society of Addiction Medicine. "The ASAM National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use." 2015.

90 National Institute on Drug Abuse. "Principles of Drug Addiction Treatment: A Research-Based Guide." Third ed., 2018.

91 OASAS—Office of Alcoholism and Substance Abuse Services. "Substance Use Disorder Service Descriptions." www.oasas.ny.gov/hps/state/CD_descriptions.cfm.

92 National Institute on Drug Abuse. "Principles of Drug Addiction Treatment: A Research-Based Guide." Third ed., 2018.

93 Ibid.

94 Ibid.

95 OASAS—Office of Alcoholism and Substance Abuse Services. "Substance Use Disorder Service Descriptions." https://www.oasas.ny.gov/hps/state/CD_descriptions.cfm.

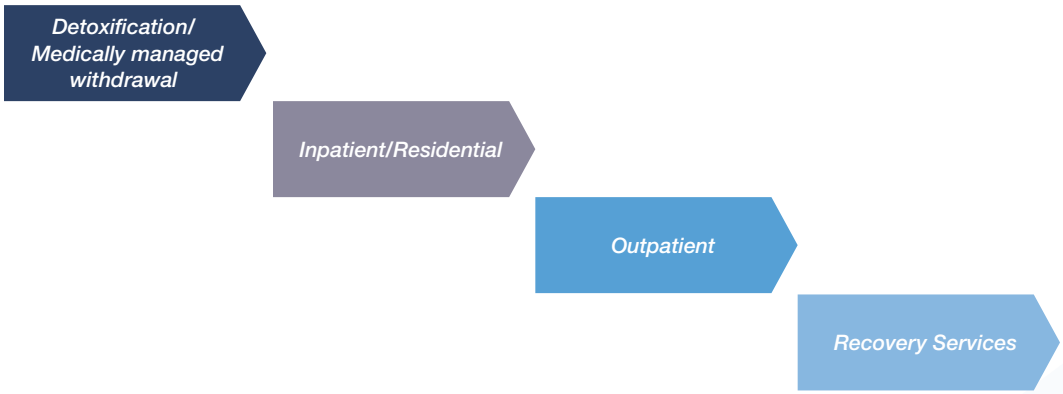
96 Ibid.

97 SAMHSA—Substance Abuse and Mental Health Services Administration. Treatments for Substance Use Disorders. 1 Oct. 2014, www.samhsa.gov/treatment/substance-use-disorders.

Outpatient facilities generally follow and vary in the type of treatment provided. Some "offer little more than drug education" while others "can be comparable to residential programs in services and effectiveness."[98] Outpatient clinics certified by OASAS provide counseling; self-help groups; use and relapse awareness and prevention; education about HIV and other diseases; risk assessment; supportive referral; and family treatment.[99] There are also certified services that focus on people with chronic medical and psychiatric conditions, as well as for individuals that need support to sustain recovery.[100]

Finally, there are recovery services that provide ongoing social and emotional support (like peer services), as well as access to community resources (like housing). Community organizations, such as recovery centers or mutual help groups, usually offer these services.

Treatment flow chart[101]



Treatment Best Practices

The National Institute on Drug Abuse (NIDA) has compiled a list of best practices for substance use disorder treatment based on research which include:[102]

1. "No single treatment is appropriate for everyone."
2. "Treatment needs to be readily available."
3. "To be effective, treatment must address the individual's [substance use] and any associated medical, psychological, social, vocational, and legal problems [as well as] be appropriate to the individual's age, gender, ethnicity, and culture."
4. "Remaining in treatment for an adequate period of time is critical. Generally, for residential or outpatient treatment, participation for less than 90 days is of limited effectiveness, and treatment lasting significantly longer is recommended for maintaining positive outcomes."

---

98 National Institute on Drug Abuse. "Principles of Drug Addiction Treatment: A Research-Based Guide." Third ed., 2018.

99 OASAS—Office of Alcoholism and Substance Abuse Services. "Substance Use Disorder Service Descriptions." www.oasas.ny.gov/hps/state/CD_descriptions.cfm.

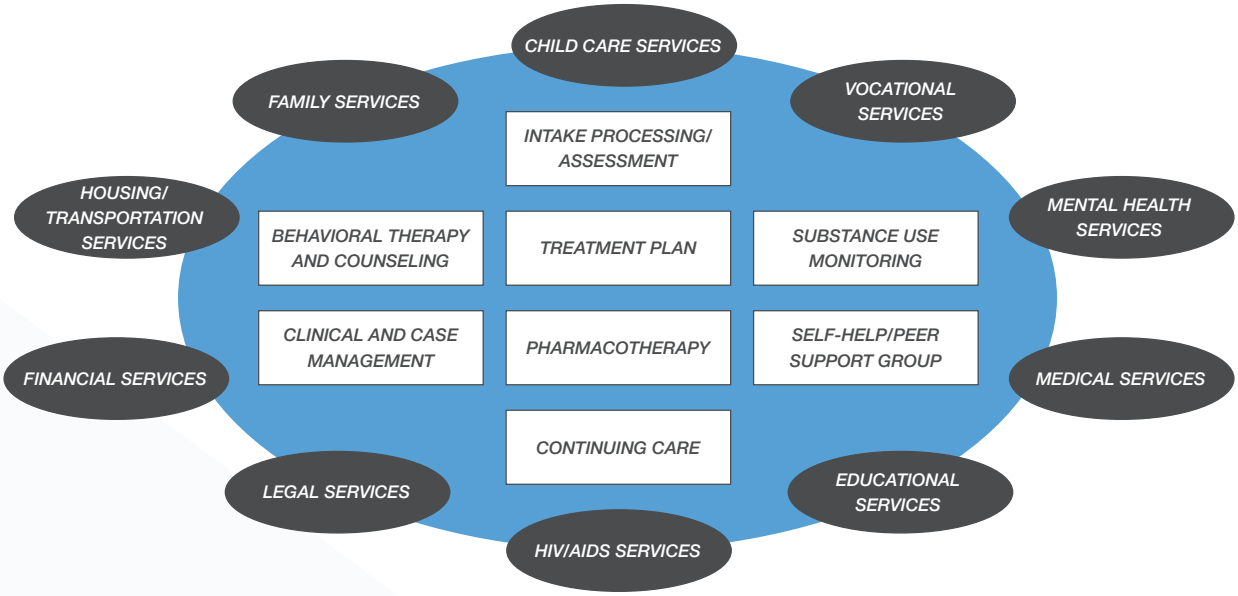
100 Ibid.

101 Authors' own creation based on research.

102 National Institute on Drug Abuse. "Principles of Drug Addiction Treatment: A Research-Based Guide." Third ed., 2018.

5. "An individual's treatment and services plan must be assessed continually and modified as necessary to ensure that it meets his or her changing needs."
6. Because substance use disorders "often co-occur with other mental illnesses" individuals need to be assessed and treated for both.
7. "Treatment does not need to be voluntary to be effective."
8. "Drug use during treatment must be monitored continuously, as lapses during treatment do occur."
9. "Treatment programs should test patients for the presence of HIV/AIDS, hepatitis B and C, tuberculosis, and other infectious diseases as well as provide targeted risk-reduction counseling, linking patients to treatment if necessary."

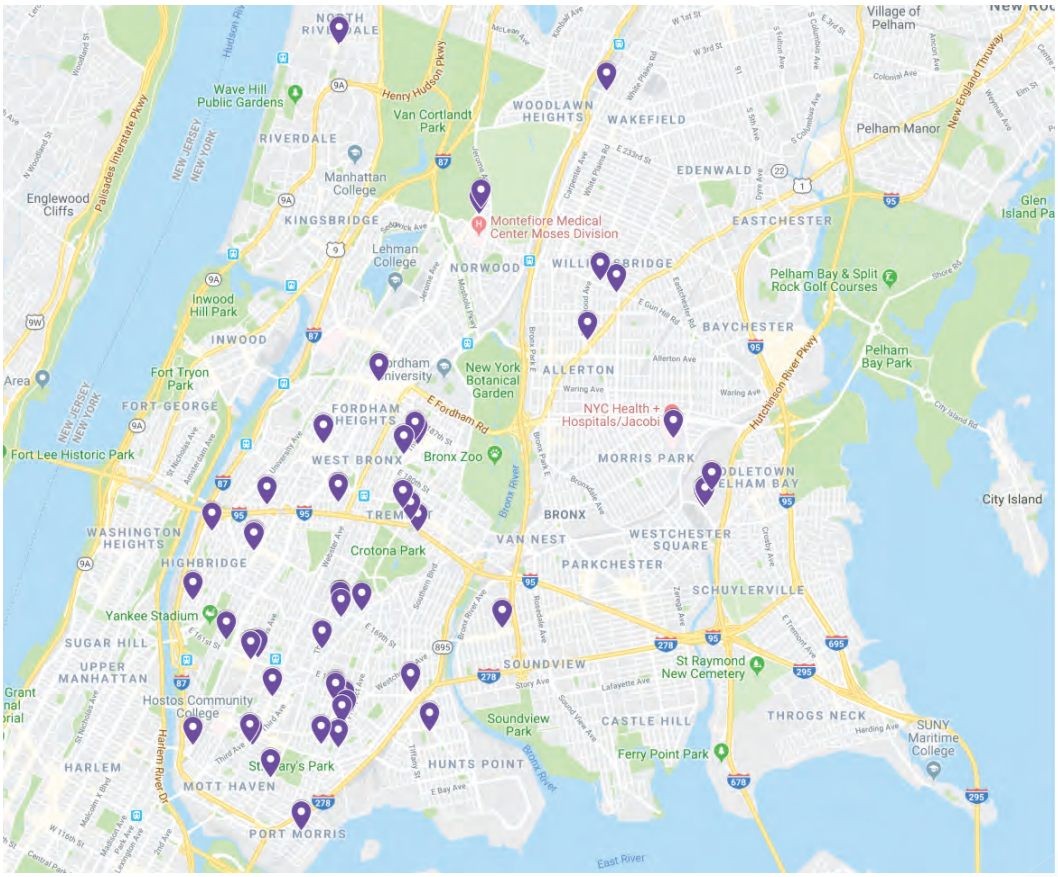
Components of Comprehensive Substance Use Treatment[103]



Treatment in the Bronx

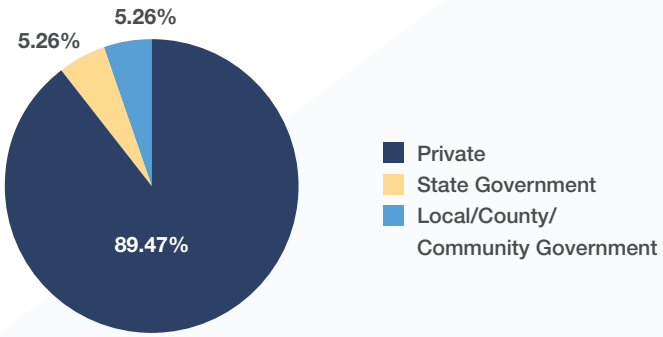
In 2018, 58 facilities that provide substance use disorder treatment services in the Bronx appeared in the SAMHSA treatment locator. The listing provides details of the facilities' characteristics and services. Of these facilities, 57 were analyzed for this report.

[103] Ibid.



In terms of their operation, the majority of facilities are privately operated (89.47%) and only a few are operated by state (5.26%) or local, county, or community government (5.26%).[105] There are no facilities operated by the Department of Defense or the Department of Veteran Affairs.

SAMHSA-Recognized Substance Use Disorder Treatment Facilities in the Bronx by Facility Operator[106]



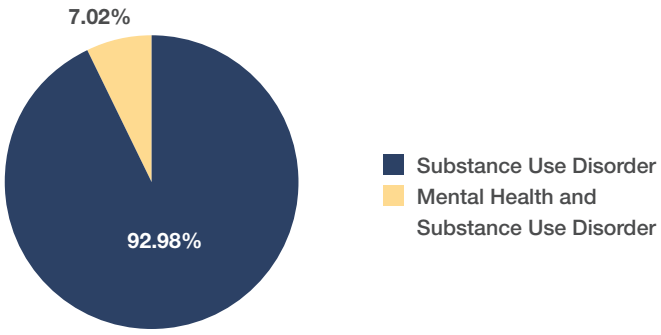
[104] SAMHSA's Treatment Locator.

[105] Authors' analysis based on data from Bronx facilities listed in SAMHSA's Treatment Locator.

[106] Ibid.

The vast majority of facilities focus solely on substance use disorders, while only 7.3% offer an integrated approach with mental health.[107] For more information on facilities in the Bronx, see Appendix 4.

Primary Focus of SAMHSA-Recognized Treatment Facilities in the Bronx[108]



Treatment Utilization in the Bronx

When examining treatment admissions data in the Bronx, a distinct trend emerges. New York State Office of Alcoholism and Substance Abuse Services (OASAS) data shows that in the past 10 years, admissions to treatment for heroin dependence have declined by 22%, while admissions to treatment for non-heroin opioid dependence have increased by 126%.[109] This decline in treatment admissions for heroin dependence found in the OASAS data parallels the treatment admissions data for SAMHSA accredited Opioid Treatment Programs (OTPs).[110] Overall, this trend of declining treatment admissions for heroin dependence is deeply troubling given the increased need for treatment as opioid-related overdoses and hospitalizations have increased substantially in recent years.

---

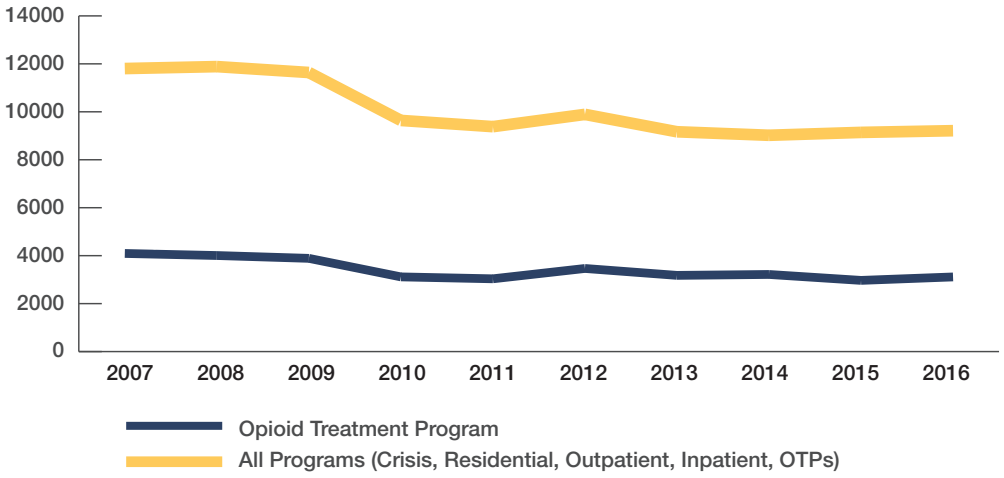
[107] Ibid.

[108] Ibid.

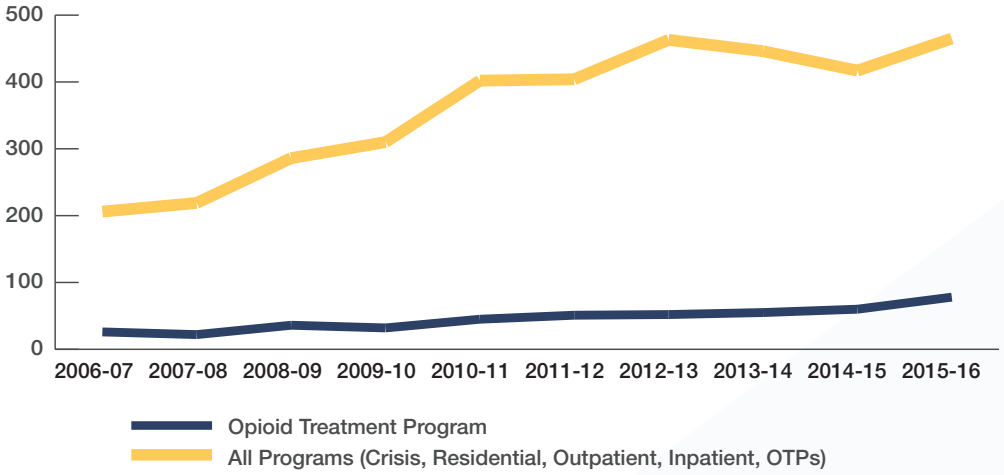
[109] Admissions are not counts of individual people. A person could be admitted into treatment more than once in a given year. The data included represents only admissions of patients to the OASAS-certified treatment system. This data does not include individuals who do not enter treatment, get treated by the U.S. Department of Veterans Affairs (VA), go outside of New York State for treatment, are admitted to hospitals but not to Substance Use Disorder (SUD) treatment, get diverted to other systems, or receive an addictions medication from a physician outside of the OASAS system of care. Data is only broken down by program category (crisis, inpatient, residential, opioid treatment program, and outpatient). "OASAS Admissions to Treatment by Program, Race, Age, Gender, Referral, and Status 2007–2017." New York Office of Alcoholism and Substance Abuse Services, 4 May 2017. NOTE: It was noted, during interviews with the Department of Health and Mental Hygiene (DOHMH) that the treatment statistics can be somewhat misleading as the New York State Office of Alcoholism and Substance Abuse Services (OASAS) collects data on multiple forms of treatment, even those that are not necessarily evidence-based. It is therefore possible that some of the decline in all program admissions for heroin dependence comes from a decrease in utilization of non-evidence-based services.

[110] Note: OTPs are accredited by SAMHSA because the services provided have been evaluated according to SAMHSA's evidence-based standards for opioid treatment.

Admissions to OASAS-Certified Treatment Programs in the Bronx, Primary Heroin[111]



Admissions to OASAS-Certified Treatment Programs in the Bronx, Primary Non-Heroin Opioid[112]

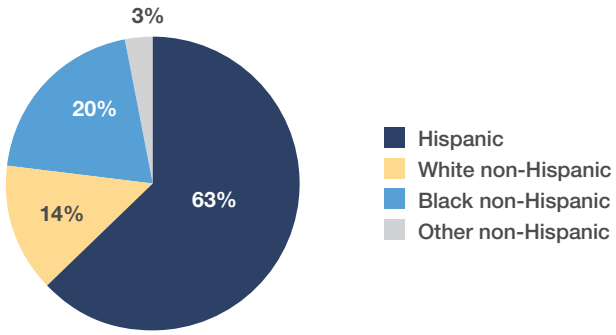


[111] New York Office of Alcoholism and Substance Abuse Services. "OASAS Admissions to Treatment by Program, Race, Age, Gender, Referral, and Status 2007–2017."

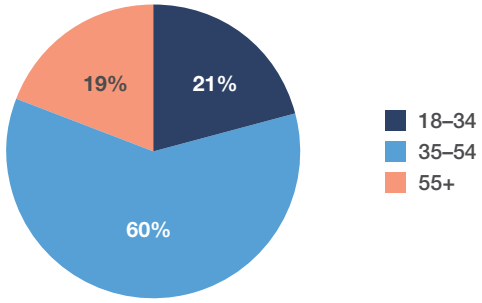
[112] Ibid.

Reflecting the demographics of opioid-related overdose fatalities in the Bronx, Bronx residents in OASAS-certified treatment programs for opioid use disorder are overwhelmingly Hispanic and older.

Bronx Residents in OASAS-Certified Treatment Programs for Opioid Use Disorder (2016)[113]



Bronx Residents in OASAS-Certified Treatment Programs for Opioid Use Disorder by Age (2016)[114]



Treatment Referral by Criminal Justice

Many people that are in contact with law enforcement and the criminal justice system have a substance use disorder. "In a survey of State and Federal prisoners, [the Bureau of Justice Statistics] estimated that about half of the prisoners met Diagnostic and Statistical Manual for Mental Disorders (DSM) criteria for drug abuse or dependence."[115] In New York City, "approximately 17% of the 55,000 people admitted to jail annually are found to be in acute opioid withdrawal."[116]

In the past several decades, there have been efforts to refer offenders to treatment through "diverting nonviolent offenders to treatment; stipulating treatment as a condition of incarceration, probation, or pretrial release; and convening specialized courts, or drug courts, that handle drug offense cases."[117] In general, drug courts offer treatment as an alternative

---

113 Ibid.

114 Ibid.

115 National Institute on Drug Abuse. "Principles of Drug Addiction Treatment: A Research-Based Guide." Third ed., 2018.

116 NYC Correctional Health Services, Cited in: The City of New York Office of the Mayor. "Healing NYC: Preventing Overdoses, Saving Lives." Unpublished data. 2017.

117 National Institute on Drug Abuse. "Principles of Drug Addiction Treatment: A Research-Based Guide." Third ed., 2018.

to incarceration, monitor progress, and link offenders to other services. "Treatment and criminal justice personnel work together on treatment planning—including implementation of screening, placement, testing, monitoring, and supervision—as well as on the systematic use of sanctions and rewards."[118]

There is evidence that mandated treatment can be effective. Research shows that "individuals who enter treatment under legal pressure have outcomes as favorable as those who enter treatment voluntarily" and that "individuals under legal coercion tend to stay in treatment longer and do as well as or better than those not under legal pressure."[119] Because of this, "combining criminal justice sanctions with drug treatment can be effective in decreasing [substance use] and related crime."[120]

In 2018, the Bronx Chief Administrative Judge and the Bronx District Attorney established the Overdose Avoidance and Recovery (OAR) program, a drug court that offers treatment as an alternative to incarceration "to misdemeanor offenders charged with criminal possession of a controlled substance."[121] Individuals deemed high utilizers or at high risk of overdose are allowed to voluntarily enter into treatment. OAR is different from other alternatives in the Bronx because offenders are not required to enter a plea and there are no consequences for not completing treatment. If an offender meaningfully engages, their case is dismissed and sealed. If s/he does not succeed, the case is transferred back to the original case processing track without prejudice.

Once cases have been deemed appropriate for OAR, defendants and their attorneys have to consent for a preliminary screening. Bronx Community Solutions screens cases to determine if offenders are eligible and links them "to drug treatment, job training, housing and other services to help them get back on track." As of January 2018, "250 cases [had] been screened, out of which 176 were deemed eligible for OAR, [and there were] 55 defendants participating in the program."[122]

Treatment Findings

Finding 1: People with opioid use disorder seek treatment after an event which they perceive as traumatic. These events can be leveraged to link people to treatment.

Most interviewees mentioned that individuals decide to access treatment as a result of a specific traumatic event. As Joseph Washington, Program Director at Phipps Neighborhoods, noted, "It usually takes something traumatic happening for people to enter treatment, like not paying rent or having the stove catch on fire. They need to lose something substantial to give a real effort in the quit, like seeing someone die of an overdose or losing a friend or a partner because of addiction." People in recovery mirrored this view. A person in treatment at Promesa narrated what prompted him to look for help, "I decided to seek treatment because I was on

---

118 Ibid.

119 Ibid.

120 Ibid.

121 New York Courts. "New Bronx Drug Courts Aim to Divert Opioid Drug Offenders at High Risk of Overdose." NY Courts, 29 Jan. 2018.

122 Ibid.

track to becoming homeless. I was tired of not sleeping, of being hungry, of getting high. [...] I was in prison and realized I didn't want my mom to die while I was away because I wouldn't be able to go see her. I knew my mom was getting older and didn't want to worry her."

It is worth noting that each individual has a different perception of what a traumatic event is; while some may want to quit their opioid use after one incident, others need to go through several such events to reach out for help. Mary Callahan, Senior Manager and Director of Outpatient Services at Odyssey House, explained that "People have different levels of what 'rock bottom' is; for one person, it may be trouble with a partner and for others, they may have to lose everything and still are not able to let the substance go."

Many interviewees think that these "rock bottom" moments are opportunities to get people into treatment. Ayesha Delany-Brumsey, Director of Behavioral Health Research and Programming at the Mayor's Office of Criminal Justice, stated, "It is important to look for touch points that are not clearly related to opioid use, but may be a result of opioid use." However, interviewees also perceive that these potential points of entry are not being sufficiently leveraged. An employee from the New York City Fire Department (FDNY) noted, "Sometimes when you're at your low, you don't have access to good programs. When people do go to the hospital or get past an immediate life-threatening situation, there is a lack of outreach before sending them back." A person in recovery at Ramon Velez Recovery Center pointed to a missed opportunity for intervention in his own life, "When I was caught stealing, the judge never asked me why I stole. If the judge had done so, I would have said 'to get money for drugs' and would have asked for help or been offered help."

Finding 2: Family members can be an important motivating factor in helping individuals with opioid use disorder access treatment; however, some lack the information and resources to do so.

Family members are often a catalyst for seeking treatment. According to the National Institute of Drug Abuse, "Family and friends can play critical roles in motivating individuals with drug problems to enter and stay in treatment. [...] Involvement of a family member or significant other in an individual's treatment program can strengthen and extend treatment benefits."[123]

As a person in recovery at Ramon Velez Recovery Center said, "Most of all it was my parents that convinced me to go to treatment." Treatment providers share this view. Anita Daniels, RN-BC, MS, Acting Executive Director at the Bronx Psychiatric Center, stated, "The individuals we treat often come at the insistence of someone who cares about them, like a family member or referred by a current treatment provider." Pam Mattel, LCSW-R, Executive Vice President and Chief Operating Officer at Acacia Network, believes "Families are a great leverage point. For example, people with children love their children and they may seek help because of them."

Most facilities (77.19%) in the SAMHSA treatment locator offer family counseling.[124] In spite of this, there is a perception that family members do not receive enough support. People in recovery at Ramon Velez Recovery Center mentioned there is a need for more education to

[123] National Institute on Drug Abuse. "Principles of Drug Addiction Treatment: A Research-Based Guide." Third ed., 2018.

[124] Authors' analysis based on data from Bronx facilities listed in SAMHSA's Treatment Locator.

help families understand addiction and that Al-Anon (a support group for family members of people with drinking problems) is great but there is no group like it for families with family members that use drugs. There is a similar group for relatives of individuals with substance use disorder called Nar-Anon, but a search of their webpage only showed seven meeting groups in the Bronx.[125]

Finding 3: Many individuals have limited or inaccurate information about treatment options, which prevents them from accessing the most appropriate treatment.

Interviewees consistently cited a lack of accurate information related to medication-assisted treatment (MAT) as a major barrier preventing Bronx residents with opioid use disorder from accessing the most appropriate treatment for them. This report has identified four key information areas that should be addressed.

1. Some Bronx residents with opioid use disorder view detox as sufficient treatment and will frequently discontinue treatment after completing detox.

Several of our interviewees noted that many people in the Bronx view detox as sufficient standalone treatment. This idea is likely rooted in a fundamental misunderstanding of opioid use disorder, and the belief that once a person's body is rid of opioids, they are fully recovered and would not benefit from further treatment. A number of our interviewees noted that detox alone is unlikely to lead to long-term recovery, as recovery from opioid use disorder is an ongoing process with many steps.

This belief that detox is sufficient as a standalone treatment is not only held by those with opioid use disorders, but also by their relatives and members of their community. One person in recovery noted that after he detoxed and began treatment, his family pressured him to leave treatment early so that he could re-enter the workforce. These sentiments are consistent with trends across the country, with a 2014 study showing that only 11% of detoxification episodes were followed by admissions to treatment within 14 days.[126] Furthermore, several experts and interviewees noted that the period immediately following detox is one of the most dangerous times for a person with opioid use disorder to experience an overdose, making this belief particularly dangerous.

---

[125] Narc-Anon. "Find a Meeting." http://www.nar-anon.org/find-a-meeting#groupspublic/?view_7_filters=%5B%7B%22field%22%3A%22field_1%22%2C%22operator%22%3A%22near%22%2C%22value%22%3A%22bronx%22%2C%22units%22%3A%22miles%22%2C%22range%22%3A%2210%22%7D%5D&view_7_page=1.

[126] Nosyk, Bohdan et al. "Utilization and Outcomes of Detoxification and Maintenance Treatment for Opioid Dependence in Publicly-Funded Facilities in California, US: 1991–2012." Drug and alcohol dependence 143 (2014): 149–157. PMC.

2. Many Bronx residents do not view MAT as medicine, but rather as a substitute form of dependency.

Although MAT does generate a physical dependency,[127] according to NIDA, "as used in maintenance treatment, methadone and buprenorphine are not heroin/opioid substitutes."[128] Despite the medical community's findings that MAT is not a heroin/opioid substitute, some people do not view MAT as medicine. An interviewee in recovery noted that many residential recovery programs are strictly geared towards abstinence from any substance. They often will not admit individuals with opioid use disorders who are taking MAT or psychiatric medication. For some patients, abstinence-based programs work. However, "after detox, many patients go to medication-free programs based on the notion that MAT is substituting one substance dependence for another," according to Dr. Arthur Robin Williams, Assistant Professor of Clinical Psychiatry at Columbia University.

During an interview with a person in recovery from Promesa, the individual noted that he was aware of brand-name forms of MAT like Suboxone and Vivitrol, but he did not want to utilize them in his treatment, stating, "Sometimes people need it [MAT] depending on their recovery, but for me I don't want to get off one thing and then get addicted to another thing. [I've] seen people taking those medications and still getting high, so I don't want to do that, but I know it helps other people." Treatment is not one-size-fits-all; economic realities (including treatment program costs), personal preferences (including past experiences with treatment), and familial situations all impact the type of treatment an individual will pursue. However, it is essential that individuals have as much information as possible about available treatment programs before deciding which plan is most appropriate. Additionally, "medication for addiction treatment needs to be destigmatized if we are to save lives," said Dr. Hillary Kunins, Assistant Commissioner of New York City Department of Mental Health and Hygiene for the Bureau of Alcohol and Drug Use Prevention, Care, and Treatment.

3. Many Bronx residents with opioid use disorder do not have accurate and complete information about all available treatment options.

Many Bronx residents with opioid use disorder base their treatment decisions, or decisions to forgo treatment, on anecdotal evidence rather than recommendations by the medical community. Dr. Arthur Robin Williams reported, "Patients have strong preferences on treatment methods based on their previous experience, as well as their friends' previous experiences." Specifically, aversions to MAT have likely developed because certain forms of MAT can cause painful or uncomfortable side effects if a person with opioid use disorder has not sufficiently detoxed before starting the MAT regimen. When a patient sufficiently detoxes before beginning their MAT regimen, these negative side effects are significantly diminished. However, as with all treatments, relapse is often part of the recovery process.

Van Asher, Syringe Access Program Manager at St. Ann's Corner of Harm Reduction, noted that misinformation related to buprenorphine's side effects can be especially difficult to overcome. "There is a lot of misinformation around the medicine [buprenorphine] as well

---

[127] American Society of Addiction Medicine. "The ASAM National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use." 2015.

[128] National Institute on Drug Abuse. "Principles of Drug Addiction Treatment: A Research-Based Guide." Third ed., 2018.

as negative associations. People will try it on the streets or take it too soon and experience uncomfortable withdrawal symptoms or hear about someone who did and not want to take it. But it's an excellent medicine." This perception is potentially problematic because MAT is a well-researched and proven method for treating opioid use disorder for people who have detoxed. A systematic review and meta-analysis of 138,716 people with opioid dependence who received either methadone or buprenorphine treatment found that retention in treatment programs was associated with substantial reductions in the risk for all cause and overdose mortality.[129] A study of 151,983 individuals in England with opioid dependency found that patients who received only psychological support as treatment were at greater risk of fatally overdosing than patients who received MAT.[130] Dr. Chinazo Cunningham, Attending Physician at Montefiore Medical Center, highlighted the efficacy of MAT by noting, "We know from research that medication is the most effective treatment. Methadone and buprenorphine are best and naltrexone is the next best. Treatment without medication is not as effective as a treatment modality with medication." This view is consistent with what evidence shows according to the American Society of Addiction Medicine.[131]

Bronx residents with opioid use disorders also lack information about other components of treatment such as Cognitive Behavioral Therapy (CBT). A person in recovery at Odyssey House shared that some fellow clients seem resistant to CBT because they are wary of working with therapists. However, she stressed that "Cognitive Behavioral Therapy really works for me because it makes you think before you act."

4. There are misperceptions among medical providers about buprenorphine's risks which may prevent some patients from accessing the most appropriate treatment for them.

Like other opioid prescription medications, buprenorphine is occasionally diverted and misused. However, according to the National Institutes of Health (NIH), this risk is overestimated. Research indicates that buprenorphine is rarely preferred by illicit opioid users for its inherent euphorigenic properties, but rather as an alternative to methadone, to self-medicate withdrawal sickness or wean off opioids.[132] Because of the perceived risk of diversion of buprenorphine, several of our interviewees noted that buprenorphine is often prescribed based on whether a patient is viewed as sufficiently trustworthy. The relatively low levels of buprenorphine usage in the Bronx may be partially attributable to (conscious or unconscious) biases against individuals in the Bronx.

Although there are some risks associated with misuse of buprenorphine, research has shown that the risk of fatal overdose from buprenorphine is significantly lower compared to full agonist opioids.[133] In fact, a recent study authored by Dr. Denise Paone, Research and Development Director for the New York City Department of Health and Mental Hygiene, indicated that

---

[129] Sordo, Luis, et al. "Mortality risk during and after opioid substitution treatment: systematic review and meta-analysis of cohort studies." *BMJ*. 2017; 357 :j1550.

[130] Pierce, Matthias, et al. "Impact of treatment for opioid dependence on fatal drug-related poisoning: a national cohort study in England." *Addiction,* vol. 111, 2016, pp. 298–308, doi.org/10.1111/add.13193.

[131] ASAM, op. cit.

[132] Cicero, Theodore J., et al. "Factors Contributing to the Rise of Buprenorphine Misuse: 2008–2013." Drug and Alcohol Dependence, vol. 142, 2014, pp. 98–104., doi:10.1016/j.drugalcdep.2014.06.005.

[133] National Institute on Drug Abuse. "Medications to Treat Opioid Use Disorder." 30 Mar. 2018, https://www.drugabuse.gov/publications/research-reports/medications-to-treat-opioid-use-disorder.

buprenorphine was present in only 2% of overdose fatalities.[134] Consistent with the research, Dr. Paone's study noted that buprenorphine-related fatalities all involved the use of additional substances including cocaine, benzodiazepines, and other opioid analgesics. Low risk from misuse and diversion is further supported by survey research of opioid users. Surveys of buprenorphine users indicated that 97% of illicit users of buprenorphine used buprenorphine to prevent opioid cravings and 90% used it to prevent withdrawal symptoms.[135] [136] Additionally, the small percentage of people who use buprenorphine illicitly tend to discontinue use over time, which could suggest that people abandon this goal after they experience the drug's relatively inferior euphorigenic rewarding effects.[137] Further research may be required to assess the related risk of individuals diverting buprenorphine for resale to fund the purchase of other illicit substances including heroin.

Finding 4: A lack of updated and readily accessible information related to treatment capacity and availability is a barrier to accessing the most appropriate treatment.

1. It is difficult to find updated information related to treatment capacity and availability in the Bronx.

Many service providers cited a lack of updated information related to treatment capacity and availability as a barrier to accessing treatment. Not all treatment providers communicate their available treatment capacity to other community stakeholders involved in the recovery process, making it difficult to link patients with the best available treatment and recovery services. However, one community stakeholder cited Bronx-Lebanon Hospital's outreach as a potential model of communicating treatment capacity. Bronx-Lebanon sends out three daily emails to several Bronx stakeholder groups notifying them how many beds they currently have available.

2. It is difficult to understand what forms of treatment are covered by various forms of insurance, including Medicaid.

Interviewees cited difficulty understanding what insurance covers as an additional barrier preventing Bronx residents from accessing treatment for opioid use disorder. An NYPD employee stated, "The public doesn't know how to access the treatment that is out there. They don't know the variety, the different types of treatment, and that there are generally no wait lists. There are misconceptions about what treatment is. They don't know the range of options out there, how to access various forms of treatment, or how insurance coverage works." Dr. Arthur Robin Williams noted that confusion over what is covered is linked to the complexity in how Medicaid pays for MAT. There are substantial variations in coverage limits across MAT type and between states. Further complicating the issue is the wide degree of variation in service limits across Medicaid Managed Care Plans. These privately-operated plans must adhere to minimum standards set

---

[134] Paone, Denise, et al. "Buprenorphine Infrequently Found in Fatal Overdose in New York City." Drug and Alcohol Dependence, vol. 155, 2015, pp. 298–301., doi:10.1016/j.drugalcdep.2015.08.007.

[135] Bazazi AR, Yokell M, Fu JJ, Rich JD, Zaller ND. "Illicit use of buprenorphine/naloxone among injecting and non injecting opioid users." J Addict Med. 2011;5(3):175–180.

[136] Schuman-Olivier Z, Albanese M, Nelson SE, et al. "Self-treatment: illicit buprenorphine use by opioid-dependent treatment seekers." J Subst Abuse Treat. 2010;39(1):41–50.

[137] National Institute on Drug Abuse. "Medications to Treat Opioid Use Disorder." 30 Mar. 2018, https://www.drugabuse.gov/publications/research-reports/medications-to-treat-opioid-use-disorder.

forth by federal, state, and local regulations in terms of what services are offered. However, there are various limits on treatment duration and which providers patients can access.[138] Understanding these technicalities and restrictions may be particularly difficult in the Bronx, as one in four residents lacks English language proficiency.[139]

Finding 5: Substantive barriers to accessing certain forms of medication-assisted treatment exist in the Bronx, leading to treatment utilization discrepancies between the Bronx and other boroughs.

1. Bronx residents receive different forms of treatment compared to their counterparts in Staten Island.

The team chose to compare Bronx treatment trends to those in Staten Island because these two boroughs have the highest rates of heroin-related emergency department visits, hospitalizations, and overdose deaths. Despite these similarities, residents of the two boroughs with opioid use disorders are treated quite differently. Staten Island residents receive buprenorphine prescriptions at a rate 3.6 times higher than Bronx residents. Bronx residents receive methadone treatment at a rate 3.2 times higher than their counterparts in Staten Island.[140] [141]

While both methadone and buprenorphine are proven to be effective MAT methods for treating opioid use disorder, this discrepancy in treatment patterns is significant. Several interviewees noted that compared to methadone, buprenorphine is often a preferable medication that better facilitates recovery. Dr. Denise Paone noted, "Methadone is highly regulated. People have to go every day to a clinic. If they have a job, it's a barrier; it's not insurmountable but it's hard." This contrasts with buprenorphine, which can be prescribed in a doctor's office by an approved primary care physician and taken by a patient at home. Furthermore, buprenorphine allows for less scheduled, more flexible dosing, allowing people with opioid use disorders to more easily attend to work and family obligations.[142] Additionally, interviewees noted that standalone methadone facilities can be stigmatizing, causing patients to forgo treatment rather than regularly visit a facility that is known in the community for treating people with opioid use disorder. Interviewees also noted that they have heard stories of methadone clinics being targeted by drug dealers hoping to sell to vulnerable people in recovery. Dr. Helena Hansen, Assistant Professor, Department of Psychiatry at New York University, spoke to this problem, noting, "Some people say that their recovery is at risk going to a methadone clinic because there are so many dealers around."

Interviewees and researchers have acknowledged that treatment pattern discrepancies frequently exist when comparing low-income communities of color with wealthier, whiter

---

[138] American Society of Addiction Medicine. "Advancing Access to Addiction Medications: Implications for Opioid Addiction Treatment." www.asam.org/docs/default-source/advocacy/aaam_implications-for-opioid-addiction-treatment_final.

[139] Literacy Partners Inc. "Literacy in New York." literacypartners.org/literacy-in-new-york-city-the-challenge.

[140] According to 2016 data from Staten Island, the borough's two methadone clinics are reportedly close to capacity. "Staten Island Needs Assessment: Opioid Addiction Prevention and Treatment Systems of Care." Columbia University School of International and Public Affairs. Spring 2017.

[141] New York City Department of Health and Mental Hygiene. "Buprenorphine and Methadone Treatment in New York City. Epi Data Brief 96, 2017."

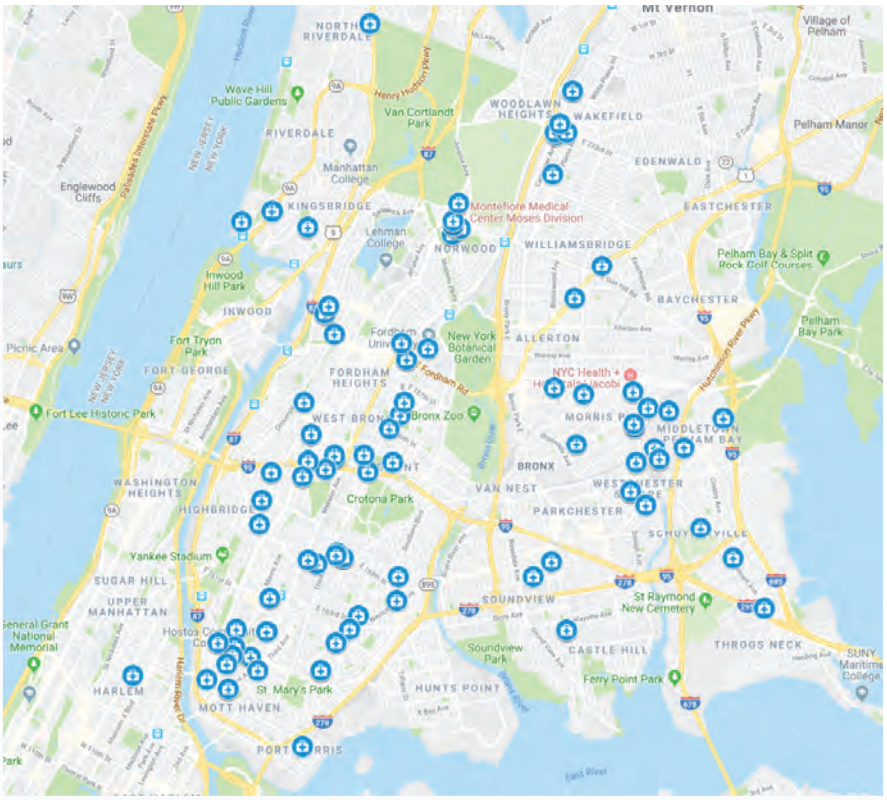
[142] Williams, Arthur Robin. "The OUD Treatment Cascade: Improving Treatment for OUD: A System-Wide Approach." New York State Psychiatric Institute, 6 Mar. 2018.

communities. Dionna King, Policy Manager at Drug Policy Alliance, stated, "Communities of color don't have the suboxone access or buprenorphine access that exists in wealthier, whiter neighborhoods." This sentiment was echoed by Mary Callahan, Senior Manager and Director of Outpatient Services at Odyssey House, "Methadone in New York City trends towards being provided to people of color, while buprenorphine is more common in white communities because they have more opportunity to go to a private physician." This sentiment is supported by research. A 2016 study authored by Dr. Helena Hansen and published in *Drug Alcohol and Dependence* found that relative buprenorphine and methadone utilization in New York City was associated with racial and income factors.[143]

2. Abundant buprenorphine capacity exists in the Bronx but it is not being utilized.

According to Dr. Denise Paone, "People are fortunate in New York City. There is comprehensive access to MAT. We are trying to increase the use of buprenorphine in communities. We have increased supply in 14 federally qualified health centers across the city." Dr. Paone's assertion related to capacity is supported by the data. According to April 2018 SAMHSA data, there are 218 medical professionals authorized to prescribe buprenorphine in the Bronx.[144]

Distribution of physicians accredited by SAMHSA to disperse buprenorphine within a five mile radius of the Bronx[145]



[143] Hansen, Helena, et al. "Buprenorphine and Methadone Treatment for Opioid Dependence by Income, Ethnicity and Race of Neighborhoods in New York City." Drug and Alcohol Dependence, vol. 164, 2016, pp. 14–21., doi:10.1016/j.drugalcdep.2016.03.028.

[144] SAMHSA—Substance Abuse and Mental Health Services Administration. "Buprenorphine Treatment Practitioner Locator." 2018.

[145] Map legend displays multiple facility types, but displayed map is with only buprenorphine physicians toggled on.

Under the Drug Treatment Act of 2000, SAMHSA-authorized physicians may prescribe buprenorphine to up to 30 patients each year after completing an eight-hour educational course and meeting certain qualifications.[146] One year after completing this course, physicians can apply for permission to prescribe buprenorphine to up to 100 patients, and one year later, physicians can apply for permission to prescribe to up to 275 patients.[147] A report from the New York State Department of Health indicates that roughly 7,200 individuals were admitted to an OASAS-certified treatment program for opioid use disorder in the Bronx in 2016, and 6,700 for heroin dependence specifically. The buprenorphine prescribing limits for the 218 medical professionals authorized to prescribe the medication in the Bronx are unknown. However, if each of these medical professionals can only prescribe to 30 patients (the lowest possible cap), sufficient capacity hypothetically exists to prescribe buprenorphine to 96% of unique clients who sought treatment for heroin dependence at an OASAS-certified treatment program, or 90% of unique clients who sought treatment for opioid use disorder (including heroin) at an OASAS-certified treatment program.[148] If authorized Bronx medical professionals were to prescribe at the 100 or 275 patient cap, then treatment capacity would far exceed existing demand for any form of OASAS-certified treatment.

According to SAMHSA records, in 2004, 727 clients nationwide received buprenorphine from trained physicians at registered Opioid Treatment Programs (OTPs). The percentage of OTPs offering buprenorphine increased from 11% in 2003 to 58% in 2015; the percentage of facilities without OTPs offering buprenorphine increased from 5% in 2003 to 21% in 2015 (facilities without OTPs could be private physician practices).[149] As supply of buprenorphine increased, so did the number of patients utilizing it. In 2015, 21,236 clients in OTPs received buprenorphine; at non-OTP facilities, the number increased from 1,670 clients in 2004 to 54,488 clients in 2015. Were the capacity of buprenorphine to increase substantially in the Bronx, one could expect a similar trend towards more patients receiving the medication.

Despite capacity, Bronx residents are prescribed buprenorphine less frequently than their counterparts in Staten Island. Certainly, many patients may choose a treatment plan that does not include buprenorphine; however, there may be other reasons for underutilization in the Bronx.

Compared to the 218 medical professionals authorized to prescribe buprenorphine in the Bronx, there are only 92 authorized to prescribe in Staten Island.[150] Despite greater capacity in the Bronx, according to the most recent data, nearly 3,000 more buprenorphine prescriptions

---

146 SAMHSA—Substance Abuse and Mental Health Services Administration. “Buprenorphine.” 31 May 2016, www.samhsa.gov/medication-assisted-treatment/treatment/buprenorphine.

147 Ibid.

148 Authors’ analysis of data found: New York State Department of Health. “New York State—County Opioid Quarterly Report.” 2018.

149 SAMHSA—Substance Abuse and Mental Health Services Administration. “Trends in the Use of Methadone, Buprenorphine, and Extended-Release Naltrexone at Substance Abuse Treatment Facilities: 2003–2015 (Update). https://www.samhsa.gov/data/sites/default/files/report_3192/ShortReport-3192.pdf.

150 New York State Department of Health. “New York State—County Opioid Quarterly Report.” 2018.

were filled in Staten Island than the Bronx.[151] This suggests that medical professionals in the Bronx behave differently than their peers in Staten Island.

When interviewees were asked to explain why they believed authorized medical professionals were under-prescribing buprenorphine, interviewees cited the stigma associated with treating patients with opioid use disorder. According to Dr. Paone, "[It is because of] Stigma. They don't want users there." Dr. Chinazo Cunningham, Attending Physician at Montefiore Medical Center, discussed this stigma in a 2017 article, "Some of the barriers that we have heard is that, I don't want quote, unquote, 'those patients in our waiting room.' My response is, quote, unquote, 'those patients are already in your waiting room,'" Cunningham said. "They are your colleagues, your patients, your neighbors, your friends and your family members because addiction does not discriminate."[152]

3. Insurance limits and issues related to the provision of opioid use disorder treatment services prevent people from accessing the best available treatment.

Insurance limits were a common theme throughout many of our interviews with community stakeholders and people in recovery. Robyn Mar, Deputy Managing Director of The Bronx Defenders stated, "One of the largest barriers to treatment is health insurance. What often prevents people from accessing treatment is the messed up health care system. People are limited in what they can access and how quickly and for how long. It is a system that punishes poverty and shuts people out of resources." This sentiment was echoed by several individuals in recovery. One interviewee cited insurance rules that limit detox and rehabilitation time. Although patients can request extensions, they are not always granted and patients may have to leave detox and treatment before they are ready. Another person in recovery cited insurance-related challenges for after-treatment programs. After completing inpatient treatment, followed by residential treatment, his primary care provider no longer accepted his insurance, making it more difficult to find the after-care required to sustain his recovery.

Finding 6: Many stakeholders support court-mandated treatment; however, others have some concerns about this approach. New models of mandated treatment may address them.

Several interviewees support criminal justice involvement in helping people with opioid use disorder access treatment. Some providers stated that mandated treatment can be effective. Mary Callahan, Senior Manager and Director of Outpatient Services at Odyssey House, said, "75% to 85% of our clients in outpatient services are mandated to treatment by criminal justice or Administration for Children's Services. We have seen that clients who are mandated may be more successful than those who are not, primarily due to the consequences should they disengage." Some individuals in recovery also have positive attitudes towards mandated treatment. A person in recovery at Ramon Velez Recovery Center stated, "I'm kinda glad I was mandated by the courts to enter treatment because it saved my life." Another person at recovery at Promesa shares this idea, "Mandated treatment is a good thing. You have to do it."

---

[151] New York City Department of Health and Mental Hygiene. "Buprenorphine and Methadone Treatment in New York City. Epi Data Brief 96, 2017." 2017.

[152] Daniel, Stephanie. "Stigma Keeps Some Doctors From Treating Drug Addiction." Side Effects Public Media. Aug. 16, 2017.

Some interviewees disapprove of mandated treatment because of their prior experience with program attitudes towards relapse. Other interviewees noted that some of these concerns have been addressed in recent mandated treatment models. Peter Jones, Attorney-in-Charge of the Bronx Criminal Defense Office at Legal Aid Society, noted, "Programs are better equipped to handle setbacks and lawyers, as well as service providers, have a better understanding about the struggles clients have in meeting the challenges of a program. No one wants to see anyone fail, so a lot of effort is put into ensuring clients have a clinically appropriate program setting to increase the likelihood of success." He also explains that "the consequences for relapse depend on the circumstances and the client's prior history. It's a case-by-case analysis but if someone simply tests positive, jail is normally not part of the discussion. Whether it's someone leaving a program or getting re-arrested, judges and DAs re-evaluate the circumstances and most individuals are generally given second, third, and sometimes fourth opportunities, sometimes in an adjusted setting or different program. There is a better understanding of what recovery means." Moreover, models like OAR described above, have departed from more punitive approaches. As Bronx District Attorney Darcel D. Clark explains, "With the traditional drug court model, people needed to plead guilty before receiving treatment; afterwards, their sentence was withdrawn or reduced. But pleading guilty had consequences. With our new approach, people can get treatment without pleading guilty."

Treatment Recommendations:

Recommendation 1: First Responders to crisis events and drug overdoses should have information on-hand about treatment programs.

First Responders may be able to use overdose sites and crisis events as intervention points to link people to the treatment services they need. An FDNY employee explained, "Emergency Medical Services and First Responders have direct access to people who are at the greatest danger for overdosing; they should have some sort of method or educational component when they come in contact with these folks to try to get them back on track."

These efforts are already underway in New York City. For example, DOHMH runs a Relay Program that Dr. Kunins explained "uses peer workers when there are non-fatal overdoses to target risk reduction strategies like counseling, naloxone, and link to care. They conduct a follow-up after 90 days. The goal is to link people to ongoing care." Bronx District Attorney Darcel D. Clark said, "[this program] has peers in emergency rooms who can counsel people right away after a near overdose." Similar programs should be further explored and expanded.

Dionna King, Policy Manager of the Drug Policy Alliance, discussed how harm reduction centers may also provide treatment linkages; "The relationship between harm reduction and treatment is crucial. A good harm reduction network should not only provide the care people need but also connect them to services or treatment, and treatment providers should work collaboratively with harm reduction agencies." According to Gail Goldstein, Senior Director of Planning and Programs at DOHMH, the 14 syringe exchange sites in the city "have, in the past, done the bulk of naloxone distribution in the city. They also refer to primary care and substance use treatment as well as provide assistance in finding housing."

Recommendation 2: Provide family members with more information about opioid use disorder and treatment programs to better support their relatives with opioid use disorder.

Organizations like SAMHSA and OASAS provide resources for individuals to locate treatment facilities but these should also be developed for family members of people with opioid use disorder. Publications or helplines targeted towards family members would create another support tool for individuals who need treatment to access it. New York City's naloxone awareness campaign explicitly portrays stories from friends and family.[153] A similar campaign concentrating on how family members can support their relatives into treatment could be effective.

Example of Messaging Focused on Relatives and Friends of People With Opioid Use Disorder

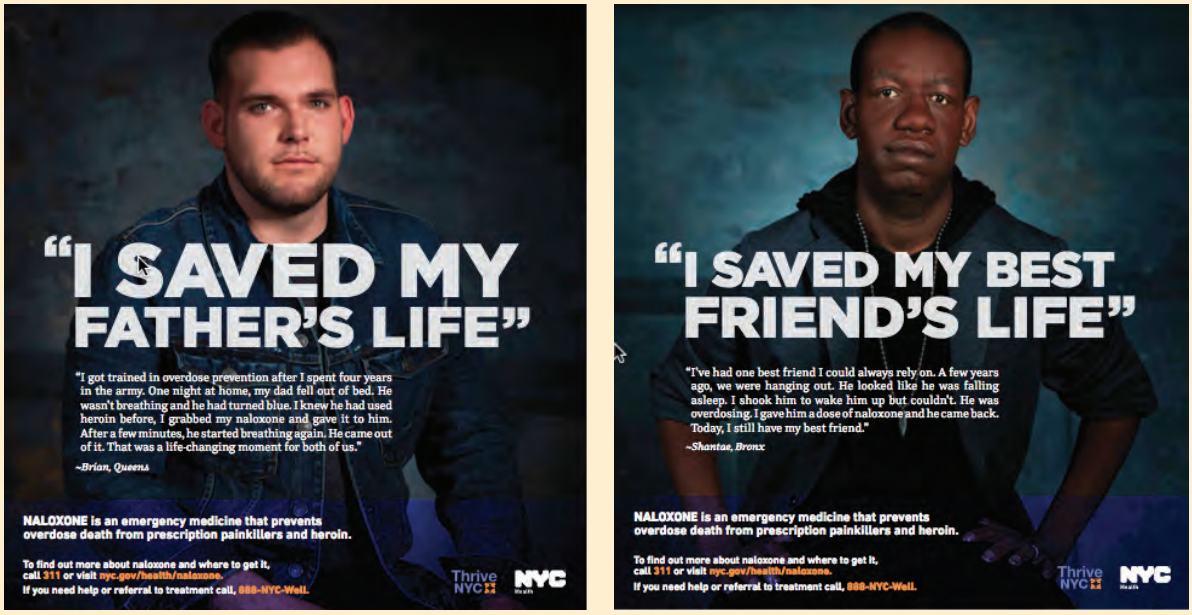


Photo Credit: *NYC Department of Health and Mental Hygiene*

In addition, more support services are needed that specifically service families of people with opioid use disorder. Family counseling should be expanded in treatment centers. Support services beyond counseling should be encouraged as well. The OASAS Family Support Navigators program, which "helps families and individuals understand the progression of addiction, how to navigate the insurance and treatment systems, and even how to adjust to a loved one's return home from treatment" is a strong start. "Navigators provide support for families throughout the recovery process and connect them to a variety of vital resources."[154] To date, there is only one Family Support Navigator in the Bronx, located at Odyssey House. The city should expand efforts to increase navigator programs. Finally, Nar-Anon, and

[153] New York City Department of Health. "Health Department Releases 'I Saved a Life' Awareness Campaign." 22 May 2017, www1.nyc.gov/site/doh/about/press/pr2017/pr038-17.page.

[154] OASAS—Office of Alcoholism and Substance Abuse Services. "Family Support Navigators." https://www.for-ny.org/family-support-navigators.

support groups like it which support families and friends of people with opioid use disorder, should be promoted.

Recommendation 3: Create targeted, highly visible, and accessible public awareness campaigns to expand accurate information about treatment options.

Many perceptions of treatment identified in this report are rooted in incomplete information that Bronx residents have received. Until comprehensive and accurate information is widely available, information gaps will serve as barriers to accessing some forms of treatment. Given the unique demographic characteristics of the Bronx treatment population (as well as the Bronx as a whole), it is necessary that public awareness campaigns are tailored to Bronx residents to expand information related to treatment.

One possible method can involve having Bronx residents that have undergone MAT share their experiences to dispel common misconceptions and advocate for the utilization of evidence-based treatment methods like MAT. Familiarizing and personalizing the success stories of MAT can be a powerful tool to dispel fears that potential patients may have related to MAT. The ThriveNYC initiative has already begun this work through its "Living Proof that Opioid Addiction Treatment with Methadone and Buprenorphine Works" campaign, but this $3 million outreach effort should be expanded and implemented in multiple languages (especially Spanish) so as to connect with all communities impacted by the epidemic.

Example of Buprenorphine Messaging

Photo Credit: *NYC Department of Health and Mental Hygiene*

Messaging in this campaign should specifically include language that provides comprehensive, accurate information related to treatment for opioid use disorder. Explaining why and when certain forms of MAT can have side effects in accessible language can also mitigate fears about buprenorphine. Additionally, public awareness campaigns should highlight MAT as a proven method for treating opioid use disorder, and explain that most individuals need a comprehensive, unique treatment plan following detox. Working with community organizations and treatment facilities can increase utilization of proven treatment modalities for opioid use disorder. Additionally, public education that stresses that detox is merely the first step in a longer process of recovery can help patients to follow through in their transition into the support services that will help them maintain their recovery. Public awareness campaigns can be incorporated into existing initiatives like the ThriveNYC initiative and should be a high priority for messaging in the Bronx.

Recommendation 4: Publish comprehensive resource lists frequently to ensure that providers and patients have accurate information when seeking treatment.

As discussed above, the lack of readily available and accessible information related to treatment capacities is a barrier that hinders Bronx residents from accessing the most appropriate treatment for them. Information sharing must be improved between individual service providers, as well as between service providers and the public. More information sharing is needed between treatment providers and other entry points to healthcare providers, including primary care providers, emergency services providers, community health centers, federally qualified health centers (FQHCs), and mental and behavioral health specialists. Additionally, better communication is needed between treatment providers and the criminal justice system. All stakeholders need increased access to information related to when and where there is available capacity for patients seeking treatment.

Greater transparency is needed from service providers related to the specific services provided at their locations. A centralized, consistently updated, comprehensive resource list of all treatment services in the Bronx should be made available to the public so individuals are informed of their options. Additionally, resources need to be explained in accessible language, and resources based on proven treatment modalities and evidence-based medicine should be highlighted. Given the demographics of the Bronx, it is important that these lists are available in multiple languages, especially Spanish.

Information about the services that are covered by Medicaid should be made readily available to the public and published in multiple languages. While ideally, comprehensive lists of services covered by all forms of insurance would be readily accessible, this may not be feasible due to wide variety in services covered by various forms of private insurance. Although this list would likely be incomplete without inclusion of services covered by private insurance, a comprehensive list explaining service offerings through Medicaid and all Bronx Medicaid Managed Care Plans would have a substantial impact on Bronx residents' knowledge of what services are affordable, given high levels of Medicaid coverage in the Bronx. A recent study has shown that Medicaid covered 71% of Bronx residents for at least one month between 2015 and 2016.[155]

Recommendation 5: Expand existing initiatives to increase access to buprenorphine in the Bronx.

Currently, DOHMH is working to improve access to buprenorphine across New York City through its Buprenorphine Training and Technical Assistance Initiative, which provides free buprenorphine waiver training and technical assistance for physicians, nurse practitioners, and physician assistants practicing in NYC. Given the disparities in prescribing patterns identified in this report, DOHMH should prioritize improving access to buprenorphine in historically marginalized communities in the Bronx, who have had limited access to buprenorphine. DOHMH efforts need to be informed by the demographics of the treatment population in the Bronx and should work towards improving access for older residents and people of color. By continuing to work to increase buprenorphine prescribing capacity, while emphasizing the

[155] Medicaid Institute. "New York Counties By Population, Medicaid Enrollment, and Enrollment Rates (Table)." United Hospital Fund, 24 Mar. 2017, uhfnyc.org/publications/881193.

need for increased utilization, it is possible that the disparity in buprenorphine utilization between the Bronx and Staten Island can be decreased.

Example of Buprenorphine Messaging

Photo Credit: *NYC Department of Health and Mental Hygiene*

Promoting buprenorphine access will also necessitate promoting follow-through from providers in the Bronx. As noted above, sufficient buprenorphine prescribing capacity appears to already exist in the Bronx. It is simply not being sufficiently utilized. DOHMH should also work with primary care providers and inform them about the role they play in addressing the crisis through prescribing MAT. DOHMH should also conduct outreach with providers who are approved to prescribe buprenorphine, but are not doing so to promote utilization of existing provider capacity.

Additionally, the medical community should be educated about all treatment options (beyond methadone) to increase utilization of available capacity and increase the number of primary care physicians in the Bronx pursuing SAMHSA approval to prescribe buprenorphine for those patients who want it. Educating providers on the relatively low diversion risk of buprenorphine can influence prescribing behavior and increase access to buprenorphine. Further, education related to historical trends in MAT access and their relationship to race and socioeconomic status can be powerful tools to decrease the observed disparities in MAT utilization.

Recommendation 6: Evaluate the Overdose Avoidance and Recovery (OAR) program to determine the programmatic outcomes and whether the program should be expanded.

Several interviewees in the criminal justice space expressed their support for OAR and indicated that similar programs should be introduced if OAR proves successful at helping clients access and remain in treatment. An evaluation of OAR program participants should be conducted to determine the program's outcomes, both in terms of treatment utilization and also future criminal behavior. The evaluation should also solicit feedback from program administrators, participants, criminal justice professionals who coordinate with OAR, and other relevant stakeholders. Additionally, quarterly presentations by OAR staff to other criminal justice and public health stakeholders could provide an opportunity to share what aspects of the program are working and for whom.

Continuum of Care

Continuum of Care Overview

This section will explore how we can adapt treatment to respond more fully to the chronic nature of opioid use disorder. Our interviews echoed the academic findings, discussed below, around the importance of establishing and maintaining a continuum of care for individuals with opioid use disorder, because of its chronic nature.

Historically, research on substance use disorders and treatment systems that serve people with substance use disorders has been designed to improve the outcomes of acute episodes of care.[156] More specifically, the conceptual model for care has been that a person seeks treatment, completes an assessment, receives treatment, and is discharged, all in a matter of weeks or months.[157] This model is at odds with "clinical experience and studies conducted over several decades, which confirm that, although some individuals can be successfully treated within an acute care framework, more than half the patients entering publicly funded addiction programs require multiple episodes of treatment over several years to achieve and sustain recovery."[158] The traditional acute care approach to treating substance use disorders has misled providers and patients to believe that clients receiving a single episode of specialized treatment should be "cured" and able to maintain lifelong abstinence.[159]

One of the approaches that clinicians and researchers have generated to improve the long-term management of a substance use disorder is to be more responsive to its chronic nature by improving the continuity of care.[160] The term "Continuum of Care" refers to a treatment system in which clients enter treatment at the level appropriate to their needs and can step up or down to more or less intense levels of treatment as needed.[161] As outlined by Mee-Lee and Shulman (2003) an effective continuum of care:

- "Features successful transfer of the client between levels of care, similar treatment philosophy across levels of care, and efficient transfer of client records;"[162]
- "Prompts clinicians to look ahead to the next step in a client's treatment;"[163] and
- "Helps clinicians engage in the treatment planning that is integral not only to the client's ongoing care but also to the transition from one level of treatment to the next."[164]

---

156 Dennis, Michael, and Christy K Scott. "Managing Addiction as a Chronic Condition." Addiction Science & Clinical Practice 4.1 (2007): 45–55. Print.

157 Ibid.

158 Ibid.

159 Ibid.

160 Ibid.

161 Forman, Robert F., and Paul D. Nagy. "Substance Abuse: Clinical Issues in Intensive Outpatient Treatment." U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment, 2006, www.ncbi.nlm.nih.gov/books/NBK64088.

162 Ibid.

163 Ibid.

164 Ibid.

Continuum of Care Findings

Finding 1: Opioid use disorder is a chronic disease.

Treatment is a process, and relapse is often a reality, but that expectation is not always communicated or understood. Nearly all of our interviewees discussed the importance of thinking about and treating opioid use disorder as a chronic disease and managing expectations around relapse.

District Attorney Darcel D. Clark said, "Relapse is part of recovery. It's going to happen. Sometimes it takes multiple attempts." District Attorney Clark also noted that treatment providers and recovery services should be prepared to handle relapse. "Getting into treatment doesn't mean you will immediately recover. It takes time. People shouldn't lose their job or housing because of an instance of relapse. We need to change the narrative. The most important thing is for them to try and work hard to get clean and to be supported. If you frame the response to the crisis of substance use like this, people will be more likely to get into treatment." Joseph Washington, Program Director at Phipps Neighborhoods, shared a similar perspective, "As they say in NA 'relapse is a reality.' It always takes more than one quit experience and it often takes a traumatic event to really stop using. Some people need to lose something substantial to give a real effort in the quit." Mr. Washington also discussed what progress looks like to Phipps, "Phipps sees 'success' as anytime anyone goes to treatment. The true goal is that the stretches of clean time get longer and longer."

Robyn Mar, Deputy Managing Director of the Criminal Defense Practice at The Bronx Defenders, discussed how thinking about opioid use disorder like other chronic diseases is a crucial part of working with people through treatment and recovery; "Addiction is a complex health issue. If somebody had a chronic physical health issue, we wouldn't get mad at them or send them to prison if they had a re-occurrence of that issue. The sort of frustration and anger that people have towards those that relapse shows a misunderstanding of what the issue is. Using scare tactics and prison sentences to address addiction is a misunderstanding of what causes drug use and addiction as well as a misunderstanding of what motivates people."

According to the American Society of Addiction Medicine, "Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry… Like other chronic diseases such as type 2 diabetes, hypertension and asthma, addiction often involves cycles of relapse and remission. In fact, relapse rates between addiction and the aforementioned chronic diseases are astoundingly comparable. Much like type 2 diabetes, hypertension and asthma, opioid addiction cannot be cured; however it can be treated and managed. When addiction is viewed as a chronic disease, the goal of treatment moves from quick cure to long-term management and ultimately strives to produce a system in which the patient is able to manage his or her disease and reduce or eliminate symptoms."[165]

[165] American Society of Addiction Medicine. "Treating Opioid Addiction as a Chronic Disease." 2014. https://www.asam.org/docs/default-source/advocacy/cmm-fact-sheet---11-07-14.pdf.

Finding 2: The continuum of care is often weaker when clients receive treatment at siloed facilities (detox, inpatient, outpatient) that do not provide a spectrum of treatment modalities. Conversely, the continuum of care is stronger when at least one of two factors is in place: integrated and/or co-located treatment facilities or case management support to help coordinate care.

Despite data showing that most treatment facilities in the Bronx provide aftercare or continuing care (82.46%) and/or discharge planning services (100%),[166] some interviewees reported that the linkage between inpatient and outpatient care is at times weak. Mr. Washington shared that "Many of our clients do not receive outpatient care after they come out of inpatient treatment, so the continuum of care is cut. And these are the people that usually relapse." He also explained that "Once every provider does their part they're done, which is not good… inpatient providers should keep in contact with outpatient providers when clients complete inpatient care to better ensure that a client's care is continued."

Conversely, many interviewees, and especially those in recovery, stressed that care linkages are more accessible when treatment facilities have integrated and/or co-located treatment services. Giuliana Ruiz-Moreno, LMSW, a Mental Health Social Worker at Bronx Community Solutions, who helps guide clients in the OAR program through various substance abuse treatment stages, said, "Treatment is more accessible when more providers are under one umbrella." She further explained that "if a client has three different appointments in three different locations it's hard for them to attend all of them and often they end up not going."

Ms. Ruiz-Moreno's observations were underscored as all three people in recovery that were interviewed from Ramon Velez Recovery Center explained that the care they receive at Ramon Velez is much better than the care they received at other treatment centers because everything is under one roof. Specifically, they said that because there is a pharmacy within the building, it makes it easier for them to get their methadone and attend group sessions regularly. The people in recovery from Ramon Velez also shared that their counselors can easily refer them to other services under the Acacia Network's umbrella that could be useful, like mental health services. Integrated services such as those provided by the Acacia Network are better suited to treat the chronic nature of opioid use disorder. One person in recovery from Ramon Velez said, "During my treatment at Ramon Velez I relapsed and needed to go back into detox. Because Ramon Velez is part of the Acacia Network, which also has a detox center, I was literally picked up for detox later that day and could easily re-engage in my recovery."

Because substance abuse treatment services are often fragmented, as discussed above, case management is another important tool to help ensure that people with opioid use disorder smoothly transition from one level of care to the next, avoid gaps in service, and respond quickly to the threat or occurrence of relapse.[167] Ms. Ruiz-Moreno explained that case management is an important part of the OAR program. "OAR case managers are helpful in preparing for and coordinating a client's after-plan with treatment providers. Case managers are helpful communicators between clients, providers, and judges."

---

[166] Authors' analysis based on data from Bronx facilities listed in SAMHSA's Treatment Locator.

[167] Center for Substance Abuse Treatment. "Comprehensive Case Management for Substance Abuse Treatment. Treatment Improvement Protocol (TIP) Series, No. 27." HHS Publication No. (SMA) 15-4215. Rockville, MD: Center for Substance Abuse Treatment, 2000.

Finding 3: The continuum of care is weakened because many Bronx treatment providers are not aware of one another's service offerings.

As Bronx stakeholders came together at The Bronx Opioid Community Summit, facilitated by the Acacia Network on April 21, 2018, some of the attendees stated that until that day they were not aware of one another's treatment offerings and that they would benefit from increased awareness of available services to enhance their clients' continuity of care. The Bronx Opioid Community Summit was an important event that began to facilitate this process of awareness and communication among diverse community stakeholder groups, including people in recovery, faith-based organizations, harm reduction centers, treatment facilities, homeless shelters, and political officials. Communication between Bronx stakeholders has also begun through HEAT, a group convened by the Bronx District Attorney's Office to address the ongoing opioid crisis in the Bronx.

Finding 4: To help people maintain their recovery, it is crucial to help them secure housing, build support networks, and find meaningful employment.

Many of our interviewees said having secure housing is crucial for sustaining recovery. Gail Goldstein, Senior Director of Planning and Programs at DOHMH, stated, "Having a place to live is everything. If someone has housing, recovery is more attainable." Despite data showing that 63.16% of treatment facilities provide housing services,[168] it is possible that services are not sufficient or that they are being underutilized. Dionna King, Policy Manager at Drug Policy Alliance noted, "There is a push to just get people into treatment and then there is nothing for them when they are done. For example, a lot of clients are in need of housing and are promised housing but don't get it after treatment."

Many of our interviewees also said that a strong support network is very important to sustain recovery. Peter Jones, Attorney-in-Charge at the Bronx Criminal Defense Office at Legal Aid Society stated, "Someone with a network of people that are supportive of their effort to address the problem is in a much better position to maintain their recovery." Data shows that 82.46% of treatment facilities in the Bronx offer social skills development.[169] The importance of support networks and their linkage to sustained recovery demonstrates that a strong emphasis on building support networks could be emphasized in existing treatment facilities.

Meaningful employment was also cited as an essential element of recovery by many of our interviewees. Pam Mattel, LCSW-R, Executive Vice President and Chief Operating Officer of the Acacia Network, said, "We need to address barriers such as language, housing, and sustainable employment. These social determinants are critical to helping people achieve and sustain recovery." Data shows that 75.44% of treatment facilities in the Bronx offer employment counseling or training.[170] A person in recovery from Promesa said, "Free time is your worst enemy. You have to keep yourself busy."

---

[168] Authors' analysis based on data from Bronx facilities listed in SAMHSA's Treatment Locator.

[169] Ibid.

[170] Ibid.

Continuum of Care Recommendations

Recommendation 1: Communicate that relapse is often a reality in the treatment process, both to individuals seeking treatment and the various stakeholders related to this crisis.

Doctors, treatment providers, criminal justice professionals, and others who help individuals access treatment should be aware of, and explicit about, relapse expectations. For almost everyone, relapse is a reality at some point in their treatment and recovery process. Defining treatment success and recovery as permanent and abstinence-only may dissuade people from accessing treatment in the first place.

Individuals seeking treatment should not be intimidated by the possibility of being "kicked out of programs" if they use drugs. Professionals who help individuals access treatment should (to the extent that it is feasible) communicate with the patient, their family, and friends that relapse may happen and does not mean that this person will "fail in treatment" in the future. Service providers can consider various ways of measuring treatment success and work on developing different treatment plans for different patients. Below are three instruments that, while not perfect for measuring recovery, have been evaluated and deemed appropriate for use by service providers to measure client progress. Shown below, the three instruments measure different domains in the recovery process.

Possible Measures of Recovery[171]

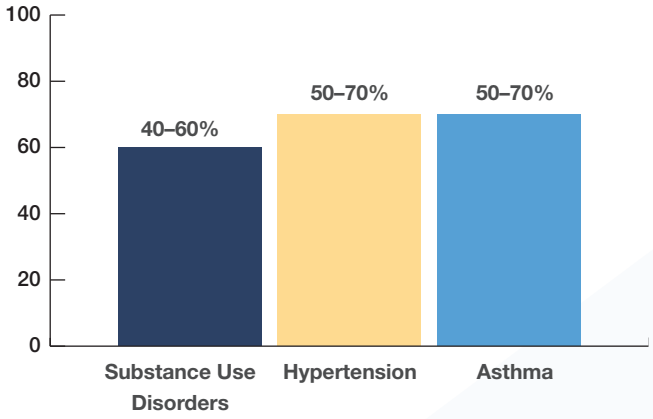
Instrument Name	Authors	Domains	Number of Items
Modular Survey	Doucette, 2008; Forum on Performance Measurement	Quality of services, perceived outcome improvement, connectedness, commitment to change	21
Recovery Capital Measure	Sterling et al., 2008	Reliance on God and faith; spirituality; recent sobriety; stable income; alcohol/drug-free environment; % lifetime spent free from the effects of substance use; satisfaction with living situation; amount of education/training	23
Client Assessment Summary	Kressel et al., 2000	Developmental, socialization, psychological, community membership	14

[171] "Environmental Scan of Measures of Recovery". Substance Abuse and Mental Health Services Administration (SAMHSA)/Center for Substance Abuse Treatment (CSAT), 2009. www.samhsa.gov/sites/default/files/partnersforrecovery/docs/Environmental_Recovery_Scan.pdf.

Recommendation 2: Communicate the chronic nature of opioid use disorder to both individuals seeking treatment and the various stakeholders related to the crisis.

Opioid use disorder, like heart disease and diabetes, is a chronic disease. According to the American Society of Addiction Medicine, "When addiction is viewed as a chronic disease, the goal of treatment moves from 'quick cure' to 'long-term management' and ultimately strives to produce a system in which the patient is able to manage his or her disease and reduce or eliminate symptoms." Many Bronx residents have lived experience with chronic diseases and/or caring for family members who have them. Discussing opioid use disorder in this context can help destigmatize the issue in the Bronx and encourage more people to access treatment and seek support from their community members. This messaging could be distributed through pamphlets at community centers or on public awareness campaign ads in subways, at bus stops, in hospitals and health centers, at community meetings, and in other public spaces. Additionally, this messaging should be reinforced at stakeholder meetings including HEAT, organized by the Bronx District Attorney's office, and Bronx Opioid Community Summits. Organizers of these groups could invite a substance abuse medical specialist to future meetings to answer questions about the chronic nature of opioid use disorder.

Comparison of Relapse Rates Between Substance Use Disorders and Other Chronic Illnesses[172] [173]



Recommendation 3: Focus on expanding existing co-located/integrated services, as well as building out additional co-located/integrated services.

Given the team's findings that co-located/integrated services strengthen the continuity of care for people with opioid use disorder, the Bronx should develop more facilities with co-located/integrated services which combine behavioral health care and general medical care in the same setting. Additionally, existing co-located and integrated services should be strengthened and expanded to ensure their long-term sustainability and quality. Future research on existing

---

[172] National Institute on Drug Abuse. "Drugs, Brains, and Behavior: The Science of Addiction." https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/treatment-recovery

[173] Relapse in this chart refers to patients who experience recurrence of symptoms that requires additional medical care. The recurrence rates are similar across these chronic illnesses, underscoring that drug use disorders should be treated like other chronic conditions; symptom recurrence serves as a trigger for renewed intervention.

models of integrated and co-located care could guide the expansion of services in the Bronx. Additional research on capital and feasibility constraints may be required.

Case Example: The Ramon S. Velez Health Center, located in the Bronx, provides primary care and specialty care to women, children, and families.[174] The center features the Ramon Velez Recovery Center which is an NYC Office of Alcoholism and Substance Abuse Services (OASAS) licensed outpatient treatment program, an on-site pharmacy, and lab.

Ramon Velez is a new addition to the Acacia Network's seven family health care centers.[175] Acacia's health centers are transforming health care by integrating primary health care with behavioral health, providing on-site specialty care, ensuring care coordination, and improving individuals and communities' overall health.[176] Three of the centers received the highest level of patient-centered medical home recognition.[177]

Recommendation 4: Hold biannual community stakeholder events where providers can share their service offerings and build relationships with one another.

Another way to strengthen the continuum of care in the Bronx is to hold biannual community stakeholder events where service providers increase existing awareness of local facilities, the services they offer, and reinforce relationships between service providers. Increased awareness and communication across providers in the Bronx is foundational to strengthening the continuum of care, as it helps providers know about treatment services that may be more appropriate for their clients, treatment services that can supplement their clients' treatment plan, or treatment services that align with their clients' after-care needs. It is therefore critical to sustain and build upon efforts like the Bronx Opioid Community Summit and the HEAT working group.

Recommendation 5: Create additional supportive case management models.

Every treatment plan is different. Many individuals will move through different treatment stages (detox, inpatient, outpatient) during their time in treatment and recovery. Programs should implement case management, particularly for clients with other health disorders and conditions or for clients who require multiple services and have difficulty in gaining access to fragmented services. For example, Bronx Community Solutions (BCS) Case Managers work to coordinate and connect their clients to appropriate treatment facilities through the Overdose Avoidance and Recovery (OAR) program.

OAR clients are transported to their first treatment facility only after BCS staff have confirmed that the facility has capacity. Upon arrival and admittance to the facility, BCS staff connect

---

174 Lawrence, Kelli. "An Acacia in Every Community." Hispanic Executive, 19 June 2017, Hispanicexecutive.com/2017/acacia-network-raul-russi.

175 Ibid.

176 Ibid.

177 Russi, Raul. "CEO Annual Letter." Acacia Network, 2016, www.acacianetwork.org/ceo-annual-letter.

with treatment center staff to begin coordinating care. BCS case managers remain in contact with clients and prepare for transfers to new treatment facilities at the client's request. This supportive, case management model frees individuals of many of the logistical barriers to accessing and progressing in treatment. This supportive case management model, which frees individuals from many of the logistical barriers to accessing and progressing in treatment, should be replicated.

Recommendation 6: Provide more recovery support services.

Achieving and maintaining recovery often necessitates access to recovery support services. "Recovery support services refer to the collection of community services that can provide emotional and practical support for continuing remission as well as daily structure and rewarding alternatives to substance use [...] These recovery resources include housing, education, employment, and social resources, as well as better overall health and well-being."[178] Treatment centers need to either build out more recovery support services such as educational/vocational referrals, peer support, social and wellness activities or form a strong linkage to a recovery center, like the Odyssey House Recovery Center, which features recovery support services.

Case Example: The Odyssey House Recovery Center in the Bronx promotes long-term recovery through "skills-building, recreation, wellness education, employment readiness, civic restoration opportunities, and other social activities."[179] A person in recovery at the Odyssey House Recovery Center provided insight about how the center's culture, sense of community, and guided resource linkages foster sustained recovery. Specifically, he explained, "In the beginning, the recovery center was an outlet for me. A safe place to go. A place without stigma." Part of the appeal of the recovery center, he shared, is that, "Services are 100% free which is great and helps to combat the sentiment that some people in the Bronx feel, which is that agencies are just there to take their Medicaid [reimbursement] and take advantage of them." For him, "Having a good support network helps me in my recovery. I know I can call people from Odyssey Recovery Center and they will answer their phones no matter what." In describing what the Center does, he shared, "The [Odyssey Recovery] Center helps build your foundation back up and refers you to resources. For example, the center can give you a list of NA meetings in your area and they will go with you if you would like to your first meeting. Recovery coaches at the center also can attend your doctor appointments with you if you would like their support."

---

[178] Substance Abuse and Mental Health Services Administration (US); Office of the Surgeon General (US). "Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health." US Department of Health and Human Services; Nov. 2016. https://www.ncbi.nlm.nih.gov/books/NBK424846.

[179] Odyssey House Recovery Center. "Odyssey House Recovery Center." odysseyhousenyc.org/recovery-program-services/recovery-center.

Prevention

Prevention Overview

While the previous sections focused on treatment for individuals with opioid use disorders, this section will focus on primary prevention strategies or ways to prevent the first use of opioids.[180] Our interviewees consistently pointed to the lack of prevention strategies in the Bronx.

Prevention can be done in various settings: when a patient is prescribed an opioid for chronic pain; in schools; and in the community. There are many people who, by modifying their behavior slightly, can be instrumental on the prevention front of the opioid epidemic. Mary Callahan, Senior Manager and Director of Outpatient Services at Odyssey House, said, "This is a public health issue. The first thing [needed for] prevention is public health education at the provider, clinical, and community levels."

Most interviewees emphasized the importance of prevention for the overall population and at an early age. Kerry Chicon, Division Chief of Strategic Enforcement and Intergovernmental Relations with the Bronx District Attorney's Office, stated, "What we need is prevention and education about the dangers of opioids focused on every segment of our population." Michael Fields, Division 2 Commander of FDNY Bronx EMS, said, "We have to get to people as early in life as possible, we need to educate them right from the get-go."

With the importance of prevention emphasized by many stakeholders in the Bronx, city government, providers, and the education sector, each have a critical role to play in preventing opioid use. Special Narcotics Prosecutor Bridget Brennan spoke to the importance of prevention in an interview, saying, "Prevention is a huge piece of reversing this epidemic."

Prevention Findings

Finding 1: There is insufficient public awareness of the dangers of opioids.

Many of our interviewees pointed to the positive steps the city has taken in its public awareness campaign surrounding naloxone. "The naloxone campaign has been effective. It is needed to keep people safe," said Bronx District Attorney Darcel D. Clark.

[180] Institute for Work & Health. "Primary, Secondary and Tertiary Prevention." Apr. 2015, www.iwh.on.ca/what-researchers-mean-by/primary-secondary-and-tertiary-prevention.

Example of Naloxone Messaging in the Bronx

Photo Credit: *Maria Jimena Gonzalez Millan*

However, there is no easily identifiable public awareness campaign that aims to prevent opioid use. "I'm not sure if people completely understand just how dangerous these substances are. We need to inform the public about the dangers that come with opioid use," explained District Attorney Clark. Dr. Ruth Cassidy, Senior Vice President of Clinical Support Services/Chief Pharmacy Officer at SBH Health System, echoed this sentiment. "There needs to be increased education surrounding opioids so individuals prescribed these medications understand their potential for addiction."

In terms of what an effective public awareness campaign might look like, many of our interviewees pointed to the anti-smoking campaign as an example of an effective public health awareness campaign. Michael Fields said, "When I was growing up there was always commercials on TV about smoking. You would see people with the hole in their throat from smoking so much. Those types of things stay in your brain."

Finding 2: Until recently, insufficient provider education contributed to problematic prescribing practices in the Bronx. This has led to insufficient patient education when new prescriptions are written.

Insufficient medical training contributed to patients having a minimal understanding of the addictive nature of pain medications they were being prescribed. Many people receive pain medication prescriptions from emergency room doctors, primary care doctors, and dentists which could be problematic, because according to Mary Callahan, "Medical school, until recently, did not have any official education related to addiction for medical students unless they were becoming addiction specialists." Many medical schools, realizing the importance of educating all physicians on this topic, are revamping their curriculums to include a greater focus on opioids.[181]

According to interviewees, many patients who have received an opioid prescription recall never receiving any information detailing the dangers of taking these medications. "I was prescribed Percocet from a doctor when I was 19. I wasn't provided with any education about opioids when I was given that prescription," an individual in recovery from Odyssey House said. District

[181] Kowarski, Ilana. "Opioid Crisis Spurs Change at Medical Schools." U.S. News & World Report, 19 Oct. 2017, www.usnews.com/education/best-graduate-schools/top-medical-schools/articles/2017-10-19/opioid-crisis-spurs-change-at-medical-schools.

Attorney Clark echoed this sentiment, “Some doctors have been prescribing opioids without explaining to people how addictive they are and that their use can lead to an addiction.”

Finally, patients feel they are not receiving enough information when ending their prescription opioid use. According to Michael Fields, “Now that it’s a national issue, doctors are taking people off of prescriptions quicker and leaving people to fend for themselves even more. A lot of doctors were overprescribing opioids, giving people easy access to them. It’s at a point now though that doctors are realizing their patients are addicted, so they stop prescribing. But that patient still has a medical problem and so they buy pills on the black market.”

Finding 3: There is no comprehensive drug and mental health curriculum in the K–12 education system.

Interviewees noted that comprehensive drug and mental health education is missing in the Bronx public education system. Students are not receiving adequate drug education in schools, if they are getting it at all. An individual in recovery from Odyssey House spoke to the importance of education, “If we don’t educate people, we’re not going to fix the problem.” Another reason drug education in schools is so important is because, as Kerry Chicon, explained, “Many children are being affected by their parents and other family members using drugs and overdosing, so it especially needs to be talked about in school settings and other places where we can engage children.”

Every person in recovery interviewed by our team stressed the important role that schools can play in prevention. Additionally, many other interviewees mentioned that schools should play a much larger role in preventing opioid use. “Education should start as young as middle school. Parents should be involved and educated as well,” Special Narcotics Prosecutor Brennan said. According to Dr. Ruth Cassidy, “A highlight needs to be placed on education of the younger adult population so they don’t fall victim to opioids and become part of the epidemic we are experiencing across the country.”

New York City has tried to remedy the lack of drug and mental health education in schools through its Substance Abuse Prevention and Intervention Specialists (SAPIS). However, the program is underfunded and understaffed.[182] In speaking with a professional involved with the SAPIS program, and from a review of the relevant programming information, the following information about the SAPIS program was gathered. SAPIS counselors operate in some, but not all, schools and are assigned to elementary, middle, and high schools. Overall, there are 300 SAPIS counselors citywide, 62 of which are assigned to the Bronx. For comparison, New York City has more than 1,800 public schools.[183] For the 2016–17 school year, SAPIS counselors delivered evidence-based prevention lessons to over 120,000 students; which

---

[182] Francois, Shaun D. “Hearing on: Governor’s Proposed Budget for 2016–2017 for Mental Hygiene.” Available at https://www.nysenate.gov/sites/default/files/articles/attachments/local_372_board_of_education_employees.pdf.

[183] New York City Department of Education. “About Us.” 2018, https://www.schools.nyc.gov/about-us/reports/doe-data-at-a-glance.

means that around 11%[184] of the 1.1 million students in New York City[185] received some form of drug and mental health education in the past year.

SAPIS counselors provide comprehensive prevention services, including classroom lessons, individual and group counseling, peer leadership programs, positive alternative activities, assessments and referrals, school-wide prevention projects, and parent workshops. With the consent of the school principal,[186] SAPIS counselors use an evidence-based curriculum in classrooms, including Life Skills, Too Good for Drugs, and Second Step. They emphasize life skills, making good life choices, goal setting, and building self-esteem. In addition to using an evidence-based drug education curriculum, SAPIS counselors cover the importance of mental health. "SAPIS counselors help our children cope with increased social pressure from their peers by providing essential mental and emotional support."[187] Additionally, SAPIS counselors screen children that are at risk for developing any type of drug-related disorder and refer them to treatment if needed.[188]

According to the senior Department of Education official who manages the SAPIS program, the curriculum used by counselors varies based on age. Additionally, the curriculum does not resemble D.A.R.E. or abstinence-only education, which has continually been proven as ineffective at deterring drug use.[189]

The SAPIS program is funded through the New York State Office of Alcoholism and Substance Abuse Services (OASAS). The DOE prevention programs collaborate with local drug prevention coalitions. In the Bronx, SAPIS works with Throggs Neck Community Action Partnership (TNCAP) and Forward South Bronx Coalition (FSBC).

Drug and mental health classes are not required in New York City.[190] Students are required to take health classes, but there is no required drug education instruction.[191] However, HIV/AIDS classes are required for all students, every year from kindergarten through 12th grade.[192] In reflecting on her own children's education in the New York City school system, Kerry Chicon noted, "My kids have had HIV/AIDS education every year since kindergarten. The information they get is age-appropriate and goes more in-depth as they age. Why aren't we doing this with drugs and pills?" Students need to get drug and mental health education every year they are in the K–12 schools system, just like they receive HIV/AIDS education.

---

184 Authors' calculation.

185 New York City Department of Education. "About Us." 2018, https://www.schools.nyc.gov/about-us/reports/doe-data-at-a-glance.

186 Klein, Joel. "School Allocation Memorandum NO 58, FY08." NYC Department of Education, 2007, https://www.nycenet.edu/offices/finance_schools/budget/DSBPO/allocationmemo/fy07_08/fy08_pdf/sam58.pdf.

187 Francois, Shaun D. "Hearing on: Governor's Proposed Budget for 2016–2017 for Mental Hygiene." Available at https://www.nysenate.gov/sites/default/files/articles/attachments/local_372_board_of_education_employees.pdf.

188 Ibid.

189 Brown, Joel H. "Youth, Drugs and Resilience Education." Journal of Drug Education, vol. 31, no. 1, 2001, pp. 83–122, doi:10.2190/365c-6f4j-7cx7-7jyh.

190 New York City Department of Education. "Health Education Requirements." 31 Aug. 2017, https://www.schools.nyc.gov/school-life/learning/subjects/health-education/health-education-requirements.

191 Ibid.

192 Ibid.

While the SAPIS program has been able to reach some of the city's students, there is no required drug or mental health education for students. If SAPIS counselors are not operating in a school, there is no guarantee that students are receiving any drug or mental health education through the course of their K–12 career.

Prevention Recommendations

Recommendation 1: Create a highly visible public awareness campaign conveying the dangers of opioids.

Using the anti-smoking campaign as a model, New York City should create a highly visible public awareness campaign that educates the public on the dangers of using opioids, even those that are prescribed by a doctor. "The public needs to be aware that opioids can affect you even if you only try them once. Experiment and your life could be over," District Attorney Clark said. These campaigns must be highly visible (high saturation and in many public spaces) in order to reach more people. From viewing ads and speaking with our interviewees, an effective campaign must:

- Contain person-centered language
- Be available in multiple languages, especially Spanish
- Not be text heavy
- Contain impactful imagery
- Be easily understood at a variety of literacy levels

Many of our interviewees mentioned the anti-smoking campaign as an effective model, especially the television commercials. "There should be a campaign on TV just like the smoking one. Showing people what the end result of using opioids is can help prevent opioid use," Michael Fields said. Every person in recovery that our team interviewed said there should be a media campaign surrounding the use of opioids. They also mentioned that a public awareness campaign must go beyond Nancy Reagan's "Just say no" campaign of the 1980s. Multiple interviewees noted that more emphasis needs to be placed on the physical and bodily consequences of using opioids.

Example of Anti-Smoking Public Awareness Campaign

Photo Credit: *Center for Disease Control and Prevention*

Photo Credit: *The Real Cost*

Photo Credit: *NYC Smoke-Free*

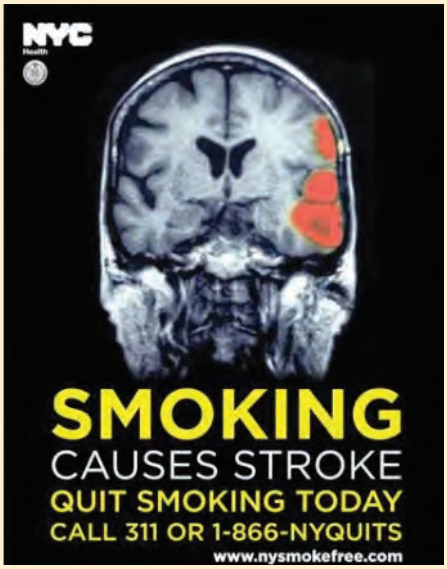


Photo Credit: *NYC Smoke-Free*

Like the anti-smoking ads shown on the previous page, the expansion of the anti-opioid campaign must not only discuss naloxone, but it must also highlight the dangers of using opioids. When asked about prevention and education, Dr. Joseph Battaglia, Medical Director at Bronx Psychiatric Center noted, "Public education should focus on just how easy it is to overdose on opiates. Fentanyl is a deadly substance and we need to get the word out about what to stay away from."

In developing a public awareness campaign, the goal should be to raise awareness of the harms of using opioids without exacerbating the stigma that many people with opioid use disorder experience.

Recommendation 2: To ensure that patients are receiving appropriate care for chronic pain, providers need to be educated on available screening tools, alternative pain management techniques, and prescribing best practices.

Through screening tools, doctors can identify patients who are at risk for developing a substance use disorder. Through SBIRT (Screening, Brief Intervention, and Referral to Treatment), physicians can detect patients who may currently have a substance use disorder or who may be more vulnerable to developing a substance use disorder.

The purpose of SBIRT is early detection during routine health visits. According to the National Institute on Drug Abuse (NIDA), "To assist physicians in identifying treatment need in their patients and making appropriate referrals, NIDA is encouraging widespread use of screening, brief intervention, and referral to treatment (SBIRT) tools for use in primary care settings through its NIDAMED initiative. SBIRT, which evidence shows to be effective against tobacco and alcohol use—and, increasingly, against abuse of illicit and prescription drugs—has the potential not only to catch people before serious drug problems develop, but also to identify people in need of treatment and connect them with appropriate treatment providers."[193]

According to interviewees, not only do patients need to be made more aware of the risks associated with opioids, they need to be made aware of other methods that exist to help manage chronic pain. Opioid prescriptions should not be thought of as the only available option for patients experiencing pain.[194] District Attorney Clark noted that doctors should be encouraged to use various forms of non-opioid treatment. Prescription and over-the-counter aspirin, non-opioid painkillers, physical therapy, acupuncture, massage, and other high-tech, non-invasive procedures have proven to be effective in managing chronic pain.[195] When treating a patient with chronic pain, primary care physicians should strive to connect patients with physicians who specialize in pain management. According to Joseph Woznica, FDNY Assistant Chief, "Physicians need more education about how to wean their patients off opioids properly and how to be more diligent to people who have pain."

---

[193] National Institute on Drug Abuse. "Principles of Drug Addiction Treatment: A Research-Based Guide (Third Edition)." 17 Jan. 2018, https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition.

[194] Recent studies suggest that the use of medical marijuana can be effective in treating chronic pain and individuals with opioid use disorder. More research must be done on this topic before integrating medical marijuana into a prescribing framework.

[195] American Society of Anesthesiologists. "Non-Opioid Treatment for Chronic Pain—When Seconds Count." www.asahq.org/whensecondscount/pain-management/non-opioid-treatment.

Patients need to receive all relevant information when being prescribed an opioid in order to make an informed decision about their medical care. “Doctors need to take more responsibility […] patients need more education around the prescriptions they are getting,” an individual in recovery with Odyssey House said.

It is important for doctors to have the most up to date information on judicious prescribing. The Substance Abuse and Mental Health Services Administration (SAMHSA) offers continuing education courses for physicians who prescribe opioids. Providers can learn about “practice management, legal and regulatory issues, opioid pharmacology, and strategies for managing challenging patient situations.”[196] The CDC provides guidelines for prescribing opioids in a primary care setting for patients over 18 years of age.[197] The purpose of these CDC guidelines is to increase provider education on opioids and to help curb the prescribing practices that have contributed to the national epidemic. “We need a stronger hold on medications and the overprescribing needs to stop,” Joseph Woznica said. Integration of these guidelines into prescribing habits can help limit the harmful side effects of opioids.

According to Dr. Hillary Kunins, Assistant Commissioner of New York City Department of Health and Mental Hygiene, “DOHMH has been working with prescribers to promote more judicious opioid prescribing so opioids are less frequently prescribed, in lower doses, and for shorter periods of time. These strategies will reduce the risk of addiction among people who are prescribed opioids. So far we have educated 1,000 providers and have seen a decrease in the number of high dosage prescriptions being written.” In interviews, care providers echoed this sentiment. “The way medication is prescribed is getting a little better because now you can’t just request a pain medication. Doctors are being more stringent in their prescribing practices, but there is still work that needs to be done, especially working with people on pain management,” Joseph Washington, Program Director at Phipps Neighborhoods, said.

Recommendation 3: Establish a comprehensive drug and mental health curriculum in K–12 schools in the Bronx.

As noted in a blog associated with the Drug Policy Alliance, “By providing comprehensive drug education to young people while their brains are still moldable, national drug use could decrease and students will find themselves more prepared for the future ahead of them.”[198] In order for schools to play a larger role in prevention, current programs need to be expanded or new programs need to be developed. “We need to get really bright and thoughtful people involved in developing curriculum for schools. We are willing to put money behind this, but we aren’t sure if schools would make use of a curriculum. Drug education is supposed to be mandated in high schools, but it doesn’t appear that requirement is being met,” said Special Narcotics Prosecutor Brennan.

Students need to receive drug and mental health education every year they are in the K–12 school system, just like they receive HIV/AIDS education. The curriculum employed at each

---

196 SAMHSA – Substance Abuse and Mental Health Services Administration. “Opioid Prescribing Courses for Health Care Providers.” 18 Jan. 2018, www.samhsa.gov/medication-assisted-treatment/training-resources/opioid-courses.

197 Centers for Disease Control and Prevention. “CDC Guideline for Prescribing Opioids for Chronic Pain.” 29 Aug. 2017, www.cdc.gov/drugoverdose/prescribing/guideline.html.

198 Fontaine, Chiara. “Drug Education in High School Needs to Be More Comprehensive.” Drug Policy Alliance, 7 June 2017, www.drugpolicy.org/blog/drug-education-high-school-needs-be-more-comprehensive.

grade level must be age-appropriate. Programs like D.A.R.E and abstinence-only programs are not effective and the failure of these programs has led to hesitancy in implementing new drug education programs.[199] There is a plethora of evidence-based curriculum available for schools, which the city needs to invest in and mandate their implementation.

Bard High School Early College (BHSEC) Manhattan has taken the lead in implementing their own curriculum. In April 2018, BHSEC became the first high school in the country to pilot the Safety First: Real Drug Education for Teens curriculum with their 9th-grade health students. The curriculum, developed by Drug Policy Alliance, is a "14-unit course [that] emphasizes critical thinking and healthy decision-making, when it comes to teenagers and drugs."[200] It takes the stance that sex education does, one of harm reduction and not of abstinence. The curriculum operates from the understanding that some students will end up using drugs. The goal is to present them with accurate information and skills that enable them to stay safe.[201]

As discussed above, SAPIS is also taking the lead in providing this curriculum to schools in the Bronx. While the SAPIS program is making important progress in this area, lack of funds prevents the program from expanding to more schools. Funding must be increased so more SAPIS counselors can be hired and more students can be reached.

Children need to be prepared for their future outside of the school system, which includes educating them about the dangers of drugs in their community. Children need to know how to make safe decisions and how to handle the difficult situations they will face. Building resilience is critical for children and New York City must make sure all students have the skills to cope with the stresses of life without turning to drugs.[202]

---

199 Kearney, Laila. "New Anti-Drug Programs Come To U.S. Schools." The Huffington Post, 13 Apr. 2015, www.huffingtonpost.com/2015/02/11/new-school-drug-programs_n_6652842.html.

200 Drug Policy Alliance. "First-Ever Realistic Drug Education Curriculum Piloted in New York City High School." 10 Apr. 2018, www.drugpolicy.org/press-release/2018/04/first-ever-realistic-drug-education-curriculum-piloted-new-york-city-high.

201 Ibid.

202 Brown, Joel H. "Youth, Drugs and Resilience Education." Journal of Drug Education, vol. 31, no. 1, 2001, pp. 83–122, doi:10.2190/365c-6f4j-7cx7-7jyh.

Appendices

Appendix 1
Expert Consultations

Dr. Arthur Robin Williams, Assistant Professor of Clinical Psychiatry at Columbia University

Dr. Bijan Kimiagar, Senior Research Associate for Community Based Research and Data Analysis at the Citizens' Committee for Children of New York

Dr. Pia M. Mauro, Department of Epidemiology, Columbia University

Fatima Shama, Executive Director, Fresh Air Fund

Appendix 2
Standard Interview Questions

1. What are the factors that contribute to opioid abuse in this community?
2. What can be done to prevent opioid abuse and overdose?
3. Why do you think some people with opioid use disorder (addiction) access treatment and others do not?
4. Why do you think some people continue to use opioids (heroin) after treatment and others do not?
5. What opportunities for intervention do you believe are missing?
    - How can they be addressed?
    - What about the role of education? (information, messaging)
6. In a perfect world, what would be your top priority in addressing the opioid crisis in your community?

Appendix 3
Interviews conducted with HEAT working group members

Organizations	Number of Interviews Conducted with Individuals in the Organization
Administration for Children's Services	1
Bronx Community Solutions	1
Bronx Defenders	1
Bronx District Attorney's Office	2
Bronx Psychiatric Center	1
Drug Policy Alliance	1
Fire Department of the City of New York (FDNY)	1
Legal Aid Society	1
Mayor's Office of Criminal Justice	1
Montefiore Hospital	1
New York City Department of Health and Mental Hygiene	3
New York City Department of Probation	1
New York City Police Department (NYPD)	1
Office of the Special Narcotics Prosecutor	1
St. Barnabas Hospital	1
Total	**18**

Interviews conducted with non-HEAT working group members

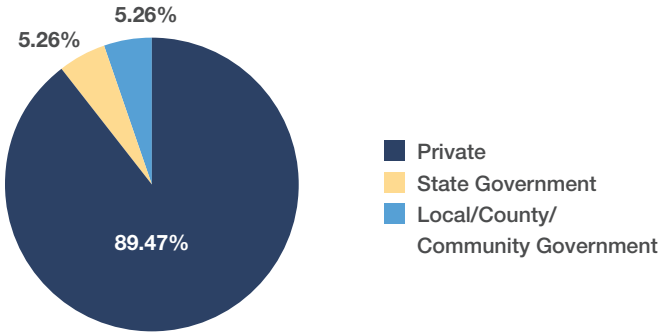
Organizations	Number of Interviews Conducted with Individuals in the Organization
Acacia Network	1
American Hospital Association	1
Dr. Helena Hansen	1
Guidance Counselor at a Bronx Public School	1
Odyssey House Provider	1
Person in recovery from Odyssey House	1
Person in recovery from Odyssey House Recovery Center	1
Person in recovery from Promesa	1
Person in recovery from Ramon Velez Recovery Center	1
St. Ann's Corner of Harm Reduction	1
Phipps Neighborhoods	1
DOE/SAPIS Program	1
Total	**12**

Appendix 4
Analysis of treatment facilities in the Bronx

In 2018, 58 facilities that provided substance use disorder treatment services in the Bronx appeared in the SAMHSA treatment locator; 57 were analyzed in this report and discussed below.

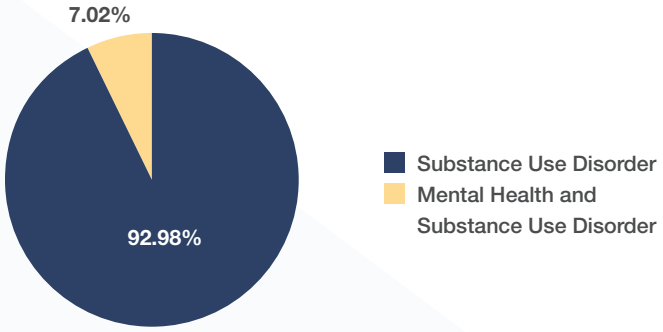
In terms of their operation, the vast majority are private (89.47%) and only a few are operated by state government (5.26%). Local, county, or community government operates 5.26% of facilities. There are no facilities operated by the Department of Defense or the Department of Veteran Affairs.

SAMHSA-Recognized Substance Use Disorder Bronx Treatment Facilities by Facility Operator



Regarding their primary focus, the great majority of facilities are centered solely on substance abuse, while only 7.3% offer an integrated approach with mental health.

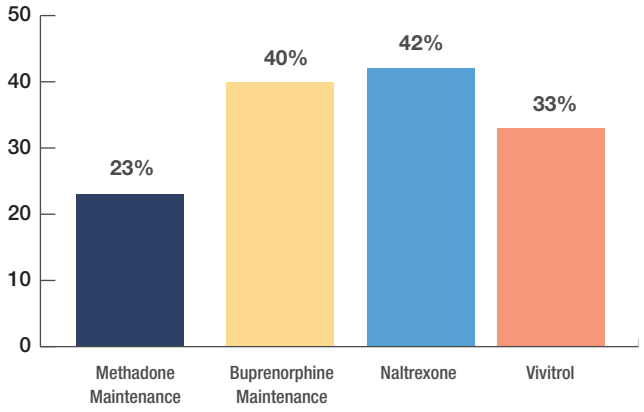
Primary Focus of SAMHSA-Recognized Bronx Treatment Facilities



Almost all facilities offer medication-assisted treatment, with only 3 facilities not using medication to treat opioid use disorder. Many offer naltrexone (42.11%) and buprenorphine maintenance (40.35%), but few offer vivitrol (33.33%).[203] Moreover, less than one quarter of facilities provide methadone maintenance (22.81%).

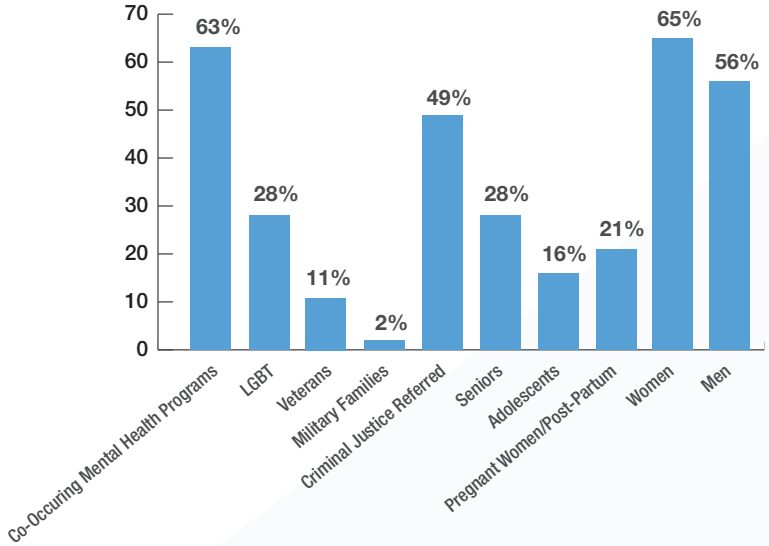
[203] Vivitrol is a brand name injectable, while naltrexone is an orally administered generic.

Types of Medication Offered at SAMHSA-Recognized Bronx Treatment Facilities



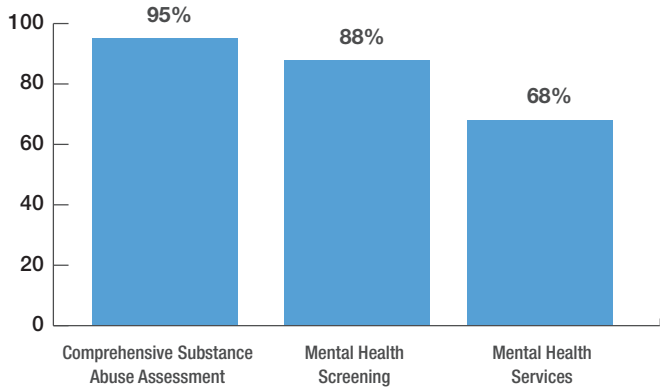
Many facilities have special programs or groups for people with co-occurring mental and substance use disorders (63.16%). Only a few offer services specialized for veterans (10.53%), but there are no services specialized for active duty military personnel. However, almost half of facilities (49.12%) specialize in criminal justice clients. In terms of age, more than one quarter offer services specifically for seniors or older adults, whereas only 15.79% target adolescents. Finally, almost two thirds of facilities have special programs for adult women (64.91%) and half for adult men (56.14%).

Special Programs and Groups at SAMHSA-Recognized Bronx Treatment Facilities



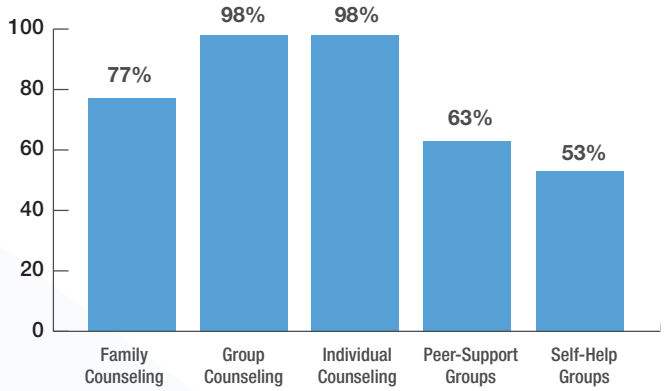
In terms of mental health, the majority of facilities help identify comorbidities through a comprehensive mental health assessment (94.74%) or a screening for mental health disorders (87.72%). However, only two thirds of facilities offer mental health services.

Mental Health Services Offered at SAMHSA-Recognized Bronx Treatment Facilities



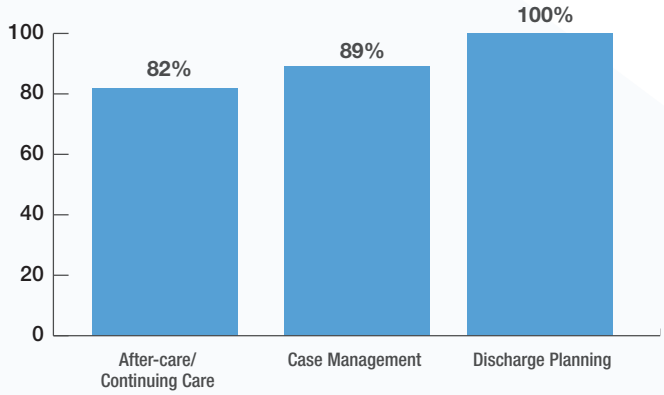
Regarding counseling services, almost all facilities provide group (98.25%) and individual (98.25%) counseling. Fewer of them, although still significant, offer family counseling (77.19%) but only half provide self-help groups (52.63%). On the other hand, around two thirds of facilities (63.16%) provide peer support services.

Types of Counseling and Support Groups Offered at SAMHSA-Recognized Bronx Treatment Facilities



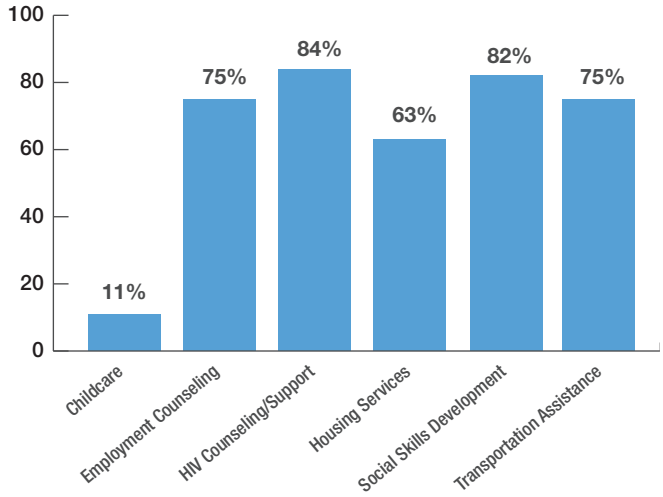
To ensure a comprehensive continuum of care, most facilities provide aftercare or continuing care (82.46%) and case management (89.47%) services. Moreover, all offer discharge planning services.

Continuum of Care Programs Offered at SAMHSA-Recognized Bronx Facilities



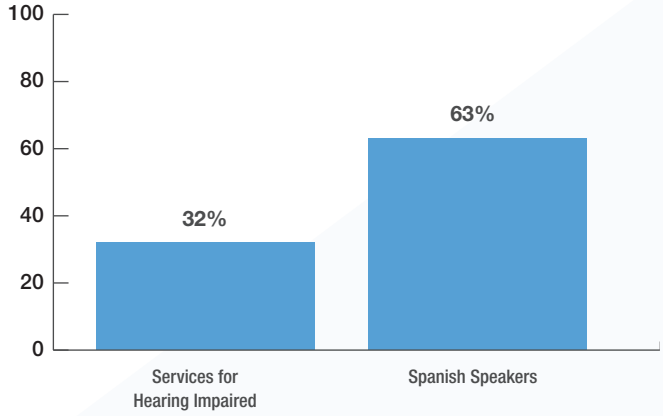
Many substance abuse treatment facilities offer additional support services. The most common are HIV/AIDS education, counseling, or support (84.21%); social skills development (82.46%); employment counseling or training (75.44%); and transportation assistance (75.44%). On the other hand, slightly under two thirds provide housing services (63.16%) and only 10.53% offer childcare for clients' children.

Ancillary Services Offered at SAMHSA-Recognized Bronx Treatment Facilities



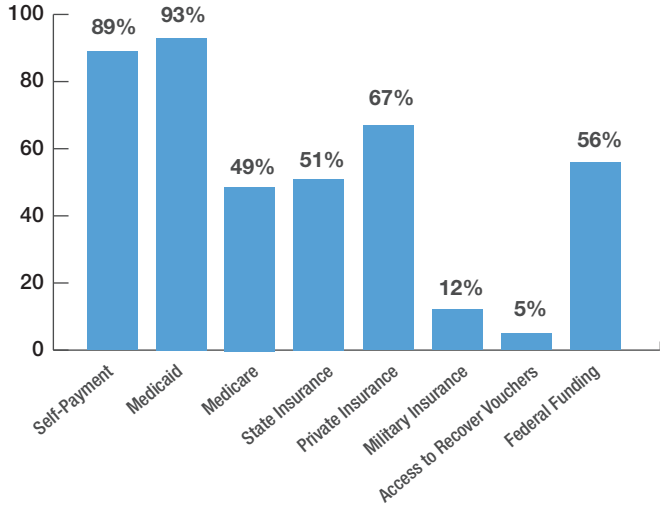
Almost two thirds of facilities provide services in Spanish (63.16%), but less than one third offer assistance for the deaf and hard of hearing (31.58%).

Specialized Language Services Offered at SAMHSA-Recognized Bronx Treatment Facilities

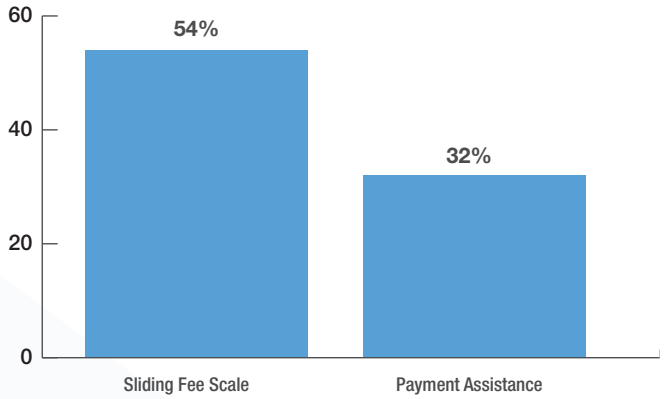


In terms of payment, insurance, and funding accepted, there are no facilities that are free (no payment accepted). However, most of them (89.47%) accept cash or self-payment, and a significant proportion accept Medicaid (92.98%), Medicare (49.12%), other state insurance (50.88%), and private insurance (66.67%). On the other hand, few accept military insurance (12.28%) or Access To Recovery (ATR) vouchers. Finally, more than half (56.14%) of facilities take federal funding for substance use programs. To assist with payment, more than half (54.39%) of facilities offer some sort of support, and around one third of them have a sliding fee scale based on income and other factors.

Types of Payment, Insurance, and Funding Accepted at SAMHSA-Recognized Bronx Treatment Facilities



Payment Assistance Available at SAMHSA-Recognized Bronx Treatment Facilities



Notes:

Report cover photo:
"1650 Grand Concourse" (https://commons.wikimedia.org/wiki/File:1650_Grand_Concourse.jpg) by siddarth_hanumanthu is licensed under CC BY 4.0 (https://creativecommons.org/licenses/by/4.0/).